

**SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL OF  
PCB REMEDIATION WASTE NOTIFICATION  
40 CFR 761.61(a)  
FORMER SILICON TRANSISTOR CORPORATION  
27 KATRINA ROAD, CHELMSFORD, MA 01824**

EPA BROWNFIELDS CLEANUP GRANT

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## 1.0 INTRODUCTION

S & R Corporation (S&R) and JTS Group, Inc., (JTS) have prepared this Self-Implementing On-Site Clean-Up and Disposal Plan (Plan) for the remediation and disposal of polychlorinated biphenyl (PCB) waste at the former Silicon Transistor Corporation, located at 27 Katrina Road in Chelmsford, Massachusetts (Site) (Figure 1). Utilizing funds received through a United States Environmental Protection Agency (EPA) Brownfields Cleanup Grant, the Town of Chelmsford (Town) contracted S&R to demolish the existing Site building. This Plan was prepared on behalf of the Town of Chelmsford to meet the Notification and Certification requirements specified in Section 761.61(a)(3) of the Toxic Substances Control Act (TSCA) Regulations (40 CFR Part 761).

The Site consists of a 3.12- acre parcel of land improved by a 34,346 square foot vacant former manufacturing facility. The Site building, constructed in 1969, is steel framed and constructed from brick, masonry block, and pre-fabricated concrete panels. Caulk containing PCBs was used to fill expansion joints between the precast concrete panels that comprise the northern, eastern and southern exterior walls of the building.

It is the intent of the activities described in this plan to remove and dispose of all PCB containing building materials, as the Site building will be completely demolished with the exception of the building slab. PCB abatement will be performed in conjunction with the demolition activities. After demolition of the Site building and subsequent soil and groundwater investigations for other contaminants of concern, the Town plans to offer the Site for redevelopment for industrial use.

PCBs were detected in building materials at levels above the TSCA hazardous waste threshold, therefore, removal and disposal of PCB impacted materials must be conducted in accordance with TSCA regulations. S&R will conduct PCB remediation work in accordance with this Plan to abate and dispose of identified PCB materials

S&R plans to conduct demolition/clean-up during the spring/summer 2011. A clean-up standard of 1 part per Million (ppm) has been established for PCB materials at the Site.

During demolition, PCB containing building materials will be deconstructed and gathered inside the building footprint on the existing concrete slab. Building materials will be mechanically separated, and waste disposal streams will be segregated based on PCB concentrations identified during characterization sampling as described in Section 3. Based on the characterization sampling, it is anticipated that PCB containing caulk from precast concrete panel expansion joints, concrete within 5 inches of each expansion joint, and wooden roof sills/soffits in contact with PCB containing caulk will be disposed of as TSCA hazardous waste (greater than 50 ppm PCBs). Standard building debris will be disposed/recycled as general solid waste. PCB contaminated soil will be disposed of as PCB remediation waste less than 50 ppm PCBs.

Verification sampling of Site materials (concrete and soil) will be conducted in accordance with Section 5.6 to confirm that the clean-up standard has been met. If verification sampling indicates that the clean-up standard has not been met, additional materials will be abated/removed until sampling of materials left in place indicate levels of PCBs are less than 1 ppm.

The contact responsible for activities associated with this Plan is:

Paul Cohen – Town Manager

50 Billerica Road

Chelmsford, MA 01824

978-250-5201

Owner Certification required by 40 CFR 761.61 is provided in Section 6.

In accordance with 40 CFR 761(a)(3), notification must be made to the Massachusetts Department of Environmental Protection (MassDEP) and the Chelmsford Board of Health Department (BOH) at least 30 days prior to the cleanup start date. Copies of this Plan will be delivered to the MassDEP and the BOH, and receipt of this Plan will serve as notification to the above mentioned departments.

## **2.0 SITE DESCRIPTION**

The Site is identified on Chelmsford Assessor's Map 52 as Block 234, Lot 2. The 3.12-acre lot is located in an industrial zone, and contains one 34,346 sf building and fenced storage areas.

The building is steel framed, with brick, block, or precast concrete walls, and a flat tar and gravel roof. Portions of the property are paved. Historically, the Site was used for manufacturing transistors and electrical components; however, the facility has been out of operation for approximately 10 years. Refer to Figure 2 for a Site Plan depicting general Site and surrounding features and to Photosheet 1 for pictures of the precast concrete exterior walls of the building.

The Bruce Freeman Rail Trail abuts the Site to the north, JapEnamelac Corporation is located to the west, and Cargotec, a heavy equipment repair and rental company is located to the south. Residential properties and the Chelmsford Mall are to the north of the rail trail, Route 495 is to the south of Katrina Rd. Meadow Brook flows west to east adjacent to Katrina Road.

### **2.1 Previous Investigations**

Soil and groundwater investigations have been conducted at the Site from 1987 to 2010. As part of the Phase I Initial Site Investigation and Tier Classification in 1989, the Disposal Site was classified as "Tier IA". Soil and groundwater investigations were tracked by the MassDEP under release tracking numbers (RTN) 3-0001205 and 3-22222.

In April, 2010, as part of a Targeted Brownfields Assessment (TBA) conducted for the EPA, Nobis Engineering Inc. (Nobis) subcontracted Scott Lawson Group (SLG) to perform a hazardous materials survey of the Site building. During the survey, SLG collected asbestos containing materials (ACM), lead based paint (LBP), and PCB samples for laboratory analysis, and inventoried hazardous and regulated materials (chemicals, batteries, fluorescent light tubes and ballasts, etc.) found throughout the building. 15 transformers were noted in the Hazardous Materials Report prepared by SLG, it was later discovered during a site walk in response to a question from a potential bidder that these transformers were the dry type/air cooled non-liquid units, these transformers remain on site and will be removed prior to demolition for proper disposal or recycling. In March, 2011, Nobis collected samples of expansion joint and roof sill caulk for PCB analysis to address data gaps identified in the SLG report.

Other than activities described above, S&R is not aware of any other investigations designed to identify regulated or hazardous materials (specifically PCBs) located in building materials or throughout the building.

### **3.0 BUILDING MATERIALS CHARACTERIZATION**

During characterization sampling activities to delineate PCBs in building materials at the Site, samples were collected from:

- Caulk- 6 samples were collected from caulk used in expansion joints between precast concrete sections of the building envelope. The expansion joints are only found in the precast concrete sections of the building that comprise the north, east and southern walls of the building as shown in Figure 2. This caulk was only observed on the exterior side of the expansion joint.
- Caulk- 2 samples were collected from caulk located at the top of the concrete panels where they met at the roof with the wooden sill/soffit.
- Concrete- 7 samples of concrete were collected at two designated distances (2"-3" and 4"-5") from the caulked expansion joints to delineate the distance which PCBs has diffused into the concrete matrix.
- Soil- 10 samples were collected immediately beneath caulked expansion joints.

#### **3.1 Sample Collection and Analysis**

On March 2, 2011, Nobis collected three samples of caulk from expansion joints between the precast concrete panels and two samples of caulk from the wooden sill/soffit at the roof. Samples were submitted to Con-test Analytical Laboratory of East Longmeadow, MA for PCB analysis by Method 8082 with manual Soxhlet extraction.

On March 30, 2011, JTS (subcontracted by S&R to perform the PCB characterization) collected samples for PCB analysis from building caulk and concrete (adjacent to caulked expansion joints and seams). JTS also collected samples of soil located immediately below expansion

joints of the precast concrete portion of the building. Samples were submitted to Geolabs, Inc. (Geolabs) of Braintree, MA for PCB analysis by method 8082 with manual Soxhlet extraction.

Prior to sampling, each precast concrete panel was assigned an identification number from 1 to 103. Caulk, concrete, and soil sample identifications collected by JTS correspond with these assigned numbers.

Refer to the following for detailed information regarding sampling locations and results:

- Table 1 results of all samples collected as part of building material and soil sampling characterization;
- Figure 3 location and results of caulk sampling performed by Nobis and JTS;
- Figure 4 location and results of concrete sampling;
- Figure 5 location and results of soil sampling; and
- Appendix A for the associated Laboratory Analytical Reports.

### **Caulk**

Each expansion joint caulk sample consisted of 3 linear inches of caulk collected from three locations at each expansion joint sampled. Samples were manually extracted from the full width of the expansion joint. Each expansion joint sample consisting of three, 3-inch sections were placed in one sample jar and submitted to the laboratory for extraction and analysis. Refer to Figure 3 for the approximate locations and results of caulk samples.

### **Concrete**

Sampling was conducted in accordance with the EPA Region I Draft Standard Operating Procedure for Sampling Concrete in the Field (December 1997).

To assess the extent of PCB migration from caulk into concrete immediately adjacent to the expansion joints, concrete delineation samples were collected from the concrete immediately adjacent to the caulked Joint. Refer to Photosheet 2 for an example of a concrete sampling location with respect to the expansion joint.

A portable containment structure was used while collecting concrete samples to contain dust. Samples were collected using a rotary hammer drill and masonry drill bits. Holes were drilled 2" to 3" into the concrete, and concrete cuttings (dust) were collected and submitted for laboratory analysis.

Samples were collected from three precast panels randomly selected on each side of the building (north, east, and south). Each of the seven samples reported in Table 1 is composed of concrete drillings from the two panels adjacent to a single caulk line. Panel numbers were determined by starting on the south side of the building at the western end of the panels at panel number 1 and continuing counterclockwise around the three sides of the building which are constructed using the panels. The total number of panels is 103. The total number of caulk

lines is 104 plus the caulk around the top of the wall. The samples which are identified on the chain of custody and in Table 1 are clarified as follows:

- a. Seam 11-15 was taken from panels 12 and 13. South side of building.
- b. Seam 30-33 was taken from panels 32 and 33. Southeast corner of building.
- c. Seam 74-76 was taken from panels 75 and 76. East side of building.
- d. Seam 27-30 was taken from panels 27 and 28. South side of building.
- e. Seam 41-43 was taken from panels 42 and 43. East side of building.
- f. Seam 99-101 was taken from panels 99 and 100. North side of building.
- g. Seam 103/block was taken from panel 103 and the concrete block wall adjacent to the caulk line.

Samples were collected at two locations stepped out from the expansion joint to delineate PCB impacts to the surrounding concrete. Concrete samples were collected at 2-3 inches and 4-5 inches from the expansion joint. Refer to Figure 4 for the approximate locations and results of the concrete samples.

To establish a baseline for comparing post demolition/remediation sampling of the remaining concrete slab, concrete samples were collected from six areas of the concrete floor slab to document any background levels of PCBs in the concrete. A rotary hammer drill was used to advance a 1 inch diameter bit 0.5 inches into the slab. Eight holes were drilled in each sample area to collect sufficient material for analysis. Sample locations were marked with orange marking paint after sample collection. The drill bit was decontaminated between each sample.

### **Soil**

Ten soil samples were collected from soil immediately below expansion joint seams. Visual inspections of the expansion joint caulking and laboratory analysis indicate that the levels of PCBs in the expansion joint caulking are relatively homogeneous and it was determined that ten soil samples would adequately characterize the PCB impact to soils adjacent to the building due to the lack of variability of the source material and lack of variability of soils surrounding the building. Soil samples were collected from all three sides of the building to account for any differences in the amount, duration or direction of sunlight, precipitation or dominant wind direction and how that might affect migration of PCBs from the caulk into soils. Please refer to Section 5.3 for further discussion of Soil characterization sampling results.

Prior to sampling, surface debris was removed to allow for the collection of a representative soil sample. A stainless steel scoop was used to collect surface soil samples from the top 2 inches of soil. Soil sample identifications were referenced to the corresponding precast concrete panel expansion joint. Soil samples were submitted to Geolabs for PCB analysis. Refer to Figure 5 for the approximate locations and results of soil samples and to Photosheet 2 for examples of soil sample locations with respect to the expansion joints.

Laboratory analysis of soil samples collected as part of the above referenced sampling activities performed to identify impact to soils from the caulking reported concentrations above the

Massachusetts Contingency Plan reporting limit of 2.0 ppm. The Town is required to report these exceedances to the MassDEP by August 10, 2011. The Town has recently contracted Nobis to prepare the required notification forms and also to prepare a Release Abatement Measure (RAM) Plan to address the removal of these soils. Because notification has not yet been made to the MassDEP a Release Tracing Number (RTN) has not yet been assigned. Notification to the MassDEP is expected to occur mid July so that the RAM plan can be prepared and submitted. It is important to note that this Site is a Brownfields Support Team (BST) Site, (a Massachusetts State Brownfields Initiative lead by the Lieutenant Governor) and representatives from the Northeast Regional Office of the MassDEP meet with the project team on a monthly bases, the BST members of the MassDEP are aware of the reportable condition as well as the timeline for reporting and are working in conjunction with the Nobis Licensed Site Professional (LSP).

#### **4.0 NATURE AND EXTENT OF PCB CONTAMINATION**

The following is a summary of results from the characterization sampling activities:

- PCBs were identified in expansion joint and roof caulk at levels above the 50 ppm TSCA hazardous waste threshold;
- Maximum concentration of PCBs in caulk was 91,300 ppm;
- Concentrations of PCBs in concrete samples collected from 2-3 inches from the expansion joints were above the cleanup standard of 1 ppm (Max concentration of 1.37 ppm);
- Concentrations of PCBs in concrete samples collected from 4-5 inches from the expansion joints were below the cleanup standard of 1 ppm;
- Maximum concentration of PCBs in soil was 21.6 ppm; and
- Background samples collected from the concrete slab returned results less than 1 ppm PCBs.

Quantities of PCB contaminated Materials at the Site are as follows:

- 1872 linear feet of expansion joint caulk (104 18-foot joints);
- 412 linear feet of roof sill caulk;
- Approximately 30 cubic yards (60 tons) of PCB contaminated concrete (estimated mass of concrete comprising the greater than 5 inches of the precast concrete panels); and
- Approximately 47 cubic yards (75 tons) of <50 ppm PCB contaminated soil. This is an estimate and was calculated assuming PCB contamination extends 2 feet away from the building foundation and to a depth of 18" below grade in the areas of soil adjacent to the precast concrete portions of the building.

#### **4.1 Other Hazardous Building Materials**

ACM, fluorescent lamps and ballasts, mercury switches, batteries and other regulated materials have been abated and removed from the Site for disposal.



## **5.0 CLEAN-UP PLAN**

This Plan has been developed based on applicable federal and state regulations. Work performed under this Plan will be conducted in conjunction with the demolition of the Site building. The following describes the basis of the cleanup plan, identifies PCB-containing materials which will be remediated, describes the remedial activities to be performed, management of remediation wastes, and verification sampling post-remediation.

### **5.1 Basis of the Clean-Up Plan**

A self-implementing clean-up will be performed pursuant to 40 CFR 761.61(a). As an integral part of the demolition process, PCB-contaminated materials will be segregated, removed from the Site and disposed of properly during and as part of demolition activities.

A clean-up standard of 1 ppm has been established for PCB materials at the Site. Verification sampling of Site materials (concrete and soil) will be conducted to confirm that the clean-up standard has been met. If verification sampling indicates that the clean-up standard has not been met, additional materials will be abated/removed until sampling of materials left in place indicate levels of PCBs are less than 1 ppm. Only the building slab will remain following demolition of the Site building.

TSCA regulations specify specific disposal requirements for bulk remediation wastes based on the concentrations of PCBs present in the material. Bulk PCB remediation waste at concentrations of 50 ppm or greater must be disposed of in a RCRA Section 3004 or 3006 permitted hazardous waste landfill or an approved PCB Disposal facility (e.g. incinerator, chemical waste landfill).

Remediation waste with PCB concentrations less than 50 ppm may be disposed of at: an approved PCB disposal facility; or when disposed pursuant to 40 CFR 761.61(a) or (c), a permitted municipal solid waste; or non-municipal non-hazardous waste facility of a RCRA Section 3004 or Section 3006 permitted hazardous waste landfill. For specific facility information please refer to Section 5.8. Manifesting requirements do not apply (40 CFR 761.61(a)(5)(i)(B)(2)(ii) and 761.61(a)(5)(v)(A)). A Massachusetts Hazardous Bill of Lading will be used to document transportation of these materials.

During Site activities the Site will be secured by a fence to prevent unauthorized access, and signage will be posted to identify the hazardous material work zone/authorized personnel only.

### **5.2 Removal and Disposal of Bulk PCB Remediation Waste >50 ppm**

PCBs were identified at concentrations greater than 50 ppm in 1,872 linear feet of caulk in expansion joints and 412 linear feet caulk adjacent to the wooden soffit/sill at the roofline. These materials, as well as approximately 30 cubic yards (60 tons) of PCB contaminated concrete (the five inches (or greater) of concrete adjacent to the expansion joint seams at the edge of the

precast panels and six inches of concrete below the roof caulk, and wooden roof sill/soffit will be separated from the precast concrete panels and disposed of as >50 ppm bulk remediation waste.

### 5.3 Removal and Disposal of Bulk PCB Remediation Waste <50 ppm

The six caulk seams analyzed for PCB reported a range of 44,300 ppm to 91,300 ppm. Whereas the caulk is visually similar and the levels of PCB were in excess of four orders of magnitude over the clean up standard the locations of the soil samples were not specifically aligned with caulk seams which were analyzed.

- a. PCB concentration in the caulking 91,300 ppm as reported for caulk line 10-11 and soil sample 11-12 are adjacent within 4 linear feet.
- b. Caulk sample 80-81 reported as 66,600 ppm was immediately above soil sample 80-82.
- c. Caulk sample 103 reported as 44,300 ppm was immediately above soil sample 103-block.
- d. Caulk samples collected by Nobis are as follows:
  - i. PCB 1 collected from caulk seam 14-15 reported as 66,000 ppm
  - ii. PCB 2 collected from caulk seam 18-19 reported as 81,000 ppm
  - iii. PCB 3 collected from caulk seam 90-91 reported as 55,000 ppm

These results add evidence to establish that expansion joint caulk in all seams is contaminated at similar concentrations. Soils collected from beneath any caulk line should represent conditions around the building when the results are taken in aggregate from the ten sample points. A range of 2.40 ppm to 21.6 ppm was reported. The mean was 8.80 ppm and the average was 8.21 ppm. The high reading of 21.6 was more than double the next highest reported value. It is statistically valid to conclude that the soil is less than 50 ppm under the seams to a confidence factor of at least three standard deviations. Supporting calculations for the standard deviations are as follows:

- a. Standard deviation formula:  
population  $\sigma = \sqrt{[\sum (x-\text{mean})^2/N]}$
- b. 10 soil samples ppm PCB: mean = sum/# of samples= 8.21 ppm

Sample Location	Result (PPM)	-	Mean (PPM)	=	X	X Squared
Soil Panel 0-1	2.40		8.21		-5.81	33.76
Soil Panel 11-12	5.68		8.21		-2.53	6.40
Soil Panel 32-33	21.60		8.21		13.39	179.29
Soil Panel 37-38	8.80		8.21		0.59	0.35
Soil Panel 50-51	10.40		8.21		2.19	4.80
Soil Panel 69-70	9.80		8.21		1.59	2.53
Soil Panel 80-82	4.64		8.21		-3.57	12.74
Soil Panel 90-92	9.50		8.21		1.29	1.66
Soil Panel 97-99	5.82		8.21		-2.39	5.71
Soil Panel 103/Block	3.45		8.21		-4.76	22.66
						269.90

- c.  $\sigma = \sqrt{[\sum (x - \text{mean})^2 / N]}$  substituted values yields  $\sigma = \sqrt{[(269.90)/10]}$
- d.  $\sigma = \sqrt{[26.99]} = 5.20$
- e. The standard deviation for a population is 5.20.
- f. The standard deviation for a sample replaces N with N-1 yielding:  
 $\sqrt{[(269.90)/9]} = \sqrt{[29.9]} = 5.468$  for the standard deviation.
- g. The level which to calculate the number of standard deviation of is 50 ppm. The mean is 8.21. The number of standard deviations is  $(50 - 8.21) / 5.5 = 7.5$  standard deviations.
- h. Due to the relatively small sample size, the standard error was calculated. Standard error equals the standard deviation divided by the square root of the sample number =  $7.5 / \sqrt{10} = 7.5 / 3.12 = 2.4$

Soils located within two feet from the precast concrete portion of the building foundation and within 18 inches of ground surface will be managed as <50 ppm remediation waste. Soil removal activities and subsequent confirmation sampling will occur after demolition activities are complete. The top 18 inches of soil will be removed from the area extending two feet from the precast portion of the Site Building. To eliminate the potential for spreading these soils or exposing workers to potentially harmful dust, this area of the Site will be covered with polyethylene sheeting and will also be delineated by orange snow fencing so that the soils are not disturbed. Demolition workers and equipment will be prohibited from entering this area of the Site. Estimated quantity to be abated is 47 cubic yards Refer to Figure 6 for the estimated area of PCB impacted soil.

Additional soil may be required to be managed if the clean-up goals are not met. Compliance with clean-up goals will be confirmed by verification sampling. Refer to Section 5.6 for verification sampling details.

#### **5.4 Work Plan**

The precast concrete panels will be separated from the steel frame of the building and laid down on the concrete slab within the footprint of the building. The slab will be covered with 6 mil polyethylene sheeting covered with steel deck plates to provide physical protection to the slab which is remaining and a barrier to PCB contamination during separation activities. See Figure 7 and the following for details and specific comments regarding this procedure:

- The roof steel will be selectively cut free of the precast panel support clips via a worker positioned in a man-lift basket wearing proper PPE and fall protection devices
- The excavator with the grapple attachment will remove the cut steel roof members and place them out of the immediate area of the concrete precast wall panel demolition
- The support clips holding the wall panels will then be cut (2 or 3 at a time) and the excavator will, use its grapple to lower the panels into the building and onto the steel deck plates placed on the concrete building slab
- The joints of the precast panels will be covered with polyethylene sheeting, to provide dust suppression The polyethylene sheeting is designed as a limited containment

structure to contain the pieces of fractured concrete during the operations of separating the PCB contaminated caulk and associated concrete to a distance of 5 inches or greater from the seam on each side. Resizing of the concrete for management as greater than 50 ppm PCB waste is likely to be required to achieve the size restrictions of the PCB facility. The polyethylene will remain in place during resizing activities. If the Poly sheeting is damaged or its location is shifted by operations prior to the completion of the activities it will be replaced and/or repositioned to achieve the desired containment.

- A second hydraulic excavator equipped with a hydraulic hammer will break the PCB impacted portion of panel free of the remaining non-PCB impacted sections of panel (five inches or greater from the caulk line).
- The non-PCB portions of concrete panels will be picked up by the demolition grapple and placed on the building slab, in an area sufficiently away from the PCB work/stockpile area.
- The PCB portions of concrete will be placed into a stockpile on the building slab in an area separate from the non-PCB impacted concrete, via the skid steer loader.
- The remaining small residual debris that the skid steer cannot pick up will be vacuumed up and the steel plates will be repositioned under the next section (bay) of wall panel in line.
- Repeat steps above, one section at a time until building is 100% demolished.

Removal of the PCB impacted concrete will be performed using a hydraulic hammer to remove concrete from the edge of the precast panels at a distance greater than 5 inches. The hammer will separate the expansion joint caulk and associated PCB impacted concrete from unimpacted concrete. If necessary, the concrete, along with the caulk, will then be reduced into manageable pieces (one foot minus). Polyethylene sheeting will remain on the caulk seam if resizing is necessary. Dust control measures will be implemented to contain the nuisance dust generated by the separation activities. Areas of the concrete panels to be separated will be pre-wet with a water mist. Concrete and caulk separation will be conducted with a polyethylene sheeting barrier laid over the top of the seam and associated concrete to help contain nuisance dust. The separation is being conducted in concrete further than 5 inches from the caulk seam which has been analyzed and reported as less than 1 ppm PCBs; therefore dust generated during mechanical separation is not anticipated to contain levels of PCBs greater than 1ppm. Concrete pieces removed during mechanical separation will be collected by sweeping and vacuuming the work area. Surfaces will be scraped, shoveled, and vacuumed to remove remaining concrete pieces and dust. Vacuums will be equipped with the appropriate HEPA filters.

Caulk and PCB contaminated concrete separated from the precast panels removed under the remediation plan will be managed as bulk remediation waste greater than or equal to 50 ppm PCB. PCB containing materials removed under the Plan will be staged on site, on the concrete slab within the footprint of the building. The PCB wastes will be stored on polyethylene sheeting within the footprint of the existing building on the concrete slab which is to remain after

completion of site activities. Please note the section of the building not constructed with the PCB caulked panels (western end) will be demolished prior to the PCB remediation activities.

The pile will be covered with polyethylene sheeting when materials are not being added to the pile or removed from the pile for shipment. Please refer to Figure 8. The stockpile will be shipped within 30 days of the initial placement of material in the stockpile. Stockpiles will be loaded into roll off containers utilizing an excavator and or skid steer (bobcat).

The stockpile will have a layer of polyethylene sheeting under the pile and over the pile. The stockpiles of PCB containing materials will be marked as described in 40 CFR 761.40 and 40 CFR 761.45, generally using commercially available 6" by 6" PCB labels on all four sides of the pile. The materials will be loaded onto transport vehicles that comply with US DOT requirements. The shipping containers (e.g. dump trailers or roll off boxes) will be properly labeled and marked to comply with USDOT, USEPA and Massachusetts regulations. Waste material will be stored behind a fenced area and properly secured to prevent release of contaminated materials.

During demolition activities, soil within the area discussed in Section 5.3 will be covered at all times with sheet polyethylene and hold down materials to prevent cross contamination, impact from weather events, or accidental contact by personnel.

## **5.5 Air Monitoring**

Air sampling will test for fugitive dust as an indicator for possible airborne PCBs. Dust control and containment will be used to limit fugitive particulates. Air monitoring will be conducted as close to the Hot Zone as possible without interfering with operations to provide a buffer between the work and the surrounding properties/potential receptors. Background will be determined by up wind monitoring stations and using a Dust Track <sup>TM</sup> Model #8520 for real time dust levels prior to starting work. Respiratory protection includes EPA Level C with organic vapor HEPA filters on the air purifying respirators during all activities in the work area. See Figure 8 for the delineation of the Hot Zone, contamination reduction zone and the clean zone. Action levels for environmental protection will be any reported concentration over background. Corrective actions will be to re-check efficiency and completeness of containment and dust control.

## **5.6 Verification Sampling and Analysis Plan for Closure**

### **WORK AREA**

After steel plates and polyethylene sheeting are removed, verification samples will be collected from the concrete slab after demolition activities are complete and decontamination of the concrete slab has been performed as described in Section 5.7. Verification samples of the slab will consist of 10 standard wipe tests followed by SW846 analysis. Six verification wipe samples will be distributed in and adjacent to the areas where PCB containing building materials was mechanically separated from non-impacted materials and generally in the areas where work had previously been performed. Two wipe verification samples will be collected from the area of the PCB contaminated stockpile and two samples will be collected from the

equipment/personnel decontamination area. Wipe samples are appropriate to determine that demolition activities have not impact the concrete floor because of the short duration of the work and dry nature of the source materials (caulk and impacted concrete). PCB contaminated material (caulk or impacted concrete) coming into contact with the concrete floor will not have adequate contact time for PCBs to impregnate or migrate into the concrete slab. Contact between the PCB impacted materials and the concrete slab will likely be on the order of hours given the pace at which materials will be moved to the lined stockpiles and also accounting for regular housekeeping. The use of deck plates and polyethylene sheeting during separation of impacted materials from unimpacted materials is intended to eliminate or minimize to the extent possible contact between PCB impacted materials and the concrete slab of the building. Additionally, wipe samples are considered applicable as the potential contaminants would be in the form of dust. There is no liquid PCB involved in the clean up. The wipe sample would be effective in collecting the dust within the sample area on the smooth concrete floor. If wipe sample results show that PCBs are present in excess of the 1ug/cm<sup>2</sup> at a location on the concrete slab as part of verification sampling, a bulk sample will be collected and analyzed to confirm that the concentration is below 1ppm.

#### CONCRETE (Recycled)

Sampling will be conducted on concrete designated as containing <1ppm PCBs, i.e. the portion of a concrete panel remaining after greater than 5-inches of concrete-impacted material adjacent to the expansion joints has been removed, to verify that PCB concentrations are below 1ppm prior to recycling. Each concrete panel will be numbered prior to demolition to facilitate this sampling and to be able to track individual panels. The first two panels to be removed from the building will be sampled (bulk) every 10 feet. Samples will be collected after the removal of greater than 5 inches of concrete adjacent to the expansion joints. Concrete panels are approximately 36 feet high, therefore 2 panels = 72 linear feet, 7 samples will be collected from the first two panels. These samples are intended to verify that the removal of concrete adjacent to the expansion joint adequately removed PCB impacted concrete to levels below 1ppm. These samples will be submitted for PCB analysis with the fastest turn-around time available. Following the sampling of the first two panels, one sample per every 10 panels will be collected for further verification, there are 103 panels, and 10 additional samples will be collected to verify that concrete designated for recycling is less than 1ppm. If these samples indicate that PCBs are >1ppm in the concrete designated for recycling, additional concrete will be removed from the areas adjacent to the expansion joint and resample. This process will continue until sampling indicates that removal has reduced PCBs to <1ppm.

The highest PCB concentration detected in concrete at a distance of 4-5" from the expansion joints as part of characterization sampling was 0.104pp.

#### SOILS

PCB-impacted expansion joints on Site amount to 412 linear feet along the ground. The precast portion of the building is comprised of 103 panels at 4 feet width each = 412 feet.

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Prior to demolition of the Site building, the location of the expansion joints will be marked on the building slab for reference during soil verification sampling. After soil is removed as described in Section 5.3, verification samples will be collected around the perimeter of the remaining slab.

Soil verification samples will be collected adjacent to the building slab in the location of former expansion joints at the excavated depth. Samples will also be collected at locations perpendicular to the building slab between expansion joint sample locations at the distance of excavation (proposed to be 2 feet). Verification samples will be collected at a frequency of every 20 feet and staggered as shown in Figure 9. Soil verification samples will be discrete samples and not composited. Soil samples will align with the "drip line" of the former expansion joints. One sample will also be collected at the beginning and end of the precast concrete portion of the building slab. Staggering soil verification samples at a frequency of every 20 feet sufficiently verifies that the cleanup standard has been met by providing a dense amount of samples in a relatively small area (excavation is to be two feet wide). Given the consistent laboratory results of both the caulking material and soil samples combined with the fact that PCBs were released to the soil at potentially 104 separate points (caulk seams) the likelihood of missing discrete areas of contamination higher than 1ppm when an adjacent sample is below the cleanup limit is minimal.

Excavated soil will be sampled for disposal characterization in accordance with the requirements of the MCP and the disposal facility. PCBs analysis will be included in the characterization sampling.

- The concrete slab sampling will consist of 10 evenly distributed wipe samples of the remaining concrete slab. Samples will be collected in the areas where work has been performed. Two samples will be collected in the area of the PCB stockpile, one sample will be collected in the equipment and personnel decontamination area and 6 samples will be collected in the areas around the work zone where physical separation of PCB-impacted concrete occurred during demolition. 11 samples will be collected (10 samples plus one duplicate).
- Concrete designated for recycling will be sampled by collecting bulk samples every 10 feet from the first two panels after greater than 5 inches of concrete have been removed from adjacent to the expansion joint. Samples will be submitted for expedited turn around. One bulk sample will be collected at a frequency of one sample per ten panels after the first two panels. 7 samples for the first 2 panels and the 10 samples for the remaining panels (total of 17 bulk samples + 1 duplicate)
- Soil verification samples will be collected at the beginning and end of the precast concrete section of the slab and at a frequency of one sample every 20 linear feet along the perimeter of the building slab please refer to Figure 9 for a depiction of the proposed sampling. 28 samples will be collected (24 samples + 2 duplicates + 2 equipment blanks).

Samples will be analyzed for PCB by Soxhlet extraction at Geolabs, Inc. of Braintree MA.

- Number of Verification Samples: Concrete 27, Soil 24
- Equipment blanks: 1 per 20 samples = 0 for concrete + 2 for soil.
- Field duplicates: 1 per 20 samples = 2 for concrete + 2 for soil.

## **5.7 Remediation and Waste Management Plan**

1. Initiate site meeting with Town personnel, S&R, JTS and other interested parties to review work plan, health and safety procedures, and Site conditions.

2. Mobilization of labor and equipment.

3. Initial review of health and safety procedures with onsite labor and management. Daily tailgate meetings will be held to discuss health and safety issues and conditions as the work progresses. Demolition and remediation of PCB caulk and concrete materials will be done only by OSHA 40 hour trained personnel. Workers handling PCB contaminated materials will be in Level C (half face respirator, PPE, booties, and gloves) for separation work and modified Level D for all other activity. At a minimum, workers shall have proper footwear and clothing (all exposed skin covered), hardhat, gloves, hearing protection, and safety glasses. Used PPE and contaminated gear will be collected and disposed of as TSCA waste.

4. Precast concrete wall panels will be removed and placed on the work area on top of the concrete slab covered in polyethylene sheeting and steel deck plates in the center of the building footprint for the separation of PCB impacted concrete. Expansion joint caulk and concrete at a distance of five inches or greater on each side along each panel edge/expansion joint will be separated from non-PCB containing concrete (the center of the panels).

5. Removal of concrete will be completed using a machine mounted hammer, pry bar or jackhammer. Concrete and caulk will be stockpiled on poly sheeting and covered when not actively adding material. The material will be loaded into permitted lined dump trailers and transported for proper offsite disposal. Dust generated during demolition will be controlled with water mist. Analysis of collected dust suppression water mixed with concrete dust will be performed to properly characterize the waste. Dust suppression water will be vacuumed and containerized into drums. The drums will be marked with a commercially available 6" by 6" PCB label. The drums will be stored adjacent to the stockpiled >50 ppm concrete, caulk and non liquid vacuumed solids.

6. Following gross removal of concrete and prior to verification sampling by JTS the concrete slab will be vacuumed with a HEPA vacuum to remove any loose or disturbed concrete and subsequently analyzed by wipe sample. The vacuumed solids will be managed for proper offsite disposal as discussed in Section 5.4. Two verification wipe samples will be collected from the area under the PCB remediation waste stockpile after shipment of the PCB waste pile. Please note that the entire surface of the concrete slab within the hot zone will be vacuumed using HEPA vacuums prior to verification sampling being conducted. Solids collected by vacuuming will be managed as a greater than 50 PCB waste. The material will be bagged to contain the



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JULY 2011

dust and will be staged adjacent to the PCB waste pile. All bags will be labeled with the commercially available 6" by 6" PCB label. The bagged solids will be added to the PCB waste pile when it is loaded onto dump trailers for delivery to the TSCA waste facility.

7. Demobilization will occur when analytical results indicate that the clean-up goals have been met in the work area. Upon completion of the work, the work area will be free of any debris, and all equipment, tools, implements, etc that were utilized during site activities will be decontaminated. The decontamination will be performed by wiping non porous surfaces with a diesel fuel wetted rag. The wipe down will be repeated and then the surface will be wiped with a dry cloth or oil pad.

Non-porous surfaces will be cleaned to less than 10ug/100cm<sup>2</sup> as verified by a standard wipe test followed by analysis by SW846. Diesel fuel contaminated wastes are non-RCRA waste. Safety gear will be wiped down as described above or discarded with the PCB solids. PCB contaminated wipes which were soaked in diesel fuel are regulated by Massachusetts as oily soils MA01. They are not regulated by RCRA as an ignitable waste as the flash point applies to liquids and the oily PCB contaminated pads are not a flammable solid by DOT definition.

The following equipment will be decontaminated:

- 50 ton excavator (Cat-345 or similar) with demolition grapple and heavy duty bucket
- 30 ton excavator (Cat-330 or similar) with hydraulic hammer
- Skid steer loader with general purpose bucket
- Steel deck plates

The excavator and skid steer bucket grapple & hammer point would be the only part of the heavy equipment that would come into contact with the effected PCB material. The entire surface of each street deck plate will be decontaminated as each would be in contact with effected PCB material.

All paperwork generated as part of the remediation (manifests, time sheets, tailgate safety meeting sheets, etc.) will be collected and submitted to the Town upon completion of the work and final demobilization.

8. Waste management of all materials generated onsite as a result of the remediation will be tracked and accounted for. At a minimum all waste will be handled and shipped according to Federal, State, and local regulations.

Wastes contaminated with greater than or equal to 50 ppm PCB will be disposed of at WMX Model City Landfill, 1330 Balmer Road, Model City, NY (Caulk associated concrete and the wooden sill/soffit).

Waste contaminated with less than less than 50 ppm PCB (soil) will be disposed of at Waste Management Turnkey Landfill in Rochester, NH.

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Non-porous equipment listed in Item 7 above (including the Steel Deck Plates) will be decontaminated and verified with wipe samples. One wipe sample per piece of equipment will be collected.

Concrete containing <1ppm of PCBs as verified by the methods outlined in Section 5.6 will be recycled at Graniteville Materials, 49 North Main Street, Westford, MA 01886

Concrete slab verification sampling will take place after vacuuming the work area, and when the disposal of the vacuumed materials and polyethylene and decontamination of the deck plates are complete.

9. Air monitoring will be performed using air pumps to test for fugitive dust as an indicator for possible airborne PCBs. Dust control and containment will be used to limit fugitive particulates. Air monitoring will be conducted as close to the Hot Zone as possible without interfering with operations to provide a buffer between the work and the surrounding properties/potential receptors. Dust Track™ units will collect samples of air for particulate analysis as a possible indicator of PCBs. Air monitoring pumps will take 8-hour samples and a time weighted average. At a minimum one pump will be upwind and two will be downwind.

10. PCB-containing caulk adheres to the concrete in the expansion joints and cannot be feasibly removed separately and will be removed together with the surrounding concrete. Leaching or diffusion of the PCB from the caulk to the concrete is verified by sampling, and will be managed by removing concrete within a minimum of 5-inches from the expansion joint. All PCB-containing caulk and PCB-impacted concrete will be collected and placed in licensed transport vehicles for off-site shipment.

11. Soil beneath PCB-containing caulk is PCB-impacted and will be removed to a minimum 18" below ground surface and at a distance of two feet from the building foundation. This material will be collected and place in lined transport vehicles and disposed of as <50 ppm waste. As discussed in previous sections, soil removal will occur after Building Demolition is complete. Soil removal will be conducted in accordance with the requirements and standards outlined in the RAM Plan (prepared in accordance with the Massachusetts Contingency Plan), as well as the TSCA and PCB Regulations. Please refer to Sections 3.1 and 5.3 for a discussion regarding PCB concentrations in soils.

12. Water from dust control during concrete separation will be collected with vacuums and containerized in 55-gallon steel drums. The water will be analyzed and disposed of as unrestricted waste if PCB concentrations are less than 0.5 ug/L (0.5 ppb) PCBs. If the PCB concentration is over 0.5 ppb it will be managed at Clean Harbors of Braintree, Inc. 1 Hill Ave, Braintree, MA.

13. Personal Protective Equipment (PPE) and polyethylene sheeting that comes in contact with potentially contaminated material used by onsite labor in the hot zone will be collected and

disposed of as  $\geq 50$  ppm TSCA waste in the manner described above for the caulk and concrete. The "Hot Zone" referenced above refers to the area shown on Figure 8 (green line). The delineation of the "Hot Zone" is intended to encompass the area of the Site where PCB contaminated debris will be present or where separation of PCB impacted materials from unimpacted materials have occurred. Any PPE or polyethylene sheeting used in this area

14. All equipment, tools, implements, etc. in contact with PCB contaminated debris or water will be decontaminated by wiping with a diesel moistened rag, repeated and then wiped with a clean dry cloth or absorbent polypropylene pad. Used diesel rags will be collected and disposed of as TSCA waste ( $\geq 50$  ppm) in the manner described above for the caulk and concrete.

15. HEPA filters, PPE and plastic sheeting used as part of the remediation will be collected and disposed of as TSCA waste ( $\geq 50$  ppm) as described above.

### **5.8 Off-Site Waste Management**

PCB containing materials with greater than 50 ppm PCBs will be shipped using a Uniform Hazardous Waste Manifest and transported by a registered licensed hazardous waste transporter for disposal at:

WMX TSCA- permitted Landfill  
130 Balmer Road  
Model City, NY

PCB containing materials with less than 50 ppm PCBs will be shipped using a Massachusetts Hazardous Bill of Lading and transported by a registered licensed hazardous waste transporter for disposal at:

Waste Management Turnkey  
30 Rochester Neck Road  
Rochester, NH 03839-7065

Cutting/dust control water greater than or equal to 0.5 ppb will be disposed of at:

Clean Harbors of Braintree, MA.  
Hill Ave.  
Braintree, MA 02184

Any concrete solids remaining in the water collection drum will be analyzed and disposed of with waste solids that contain similar or greater concentrations of PCBs.

Concrete containing  $< 1$  ppm of PCBs as determined by the methods outlined in Section 5.6 will be recycled at:

Graniteville Materials  
49 North Main Street  
Westford, MA 01886

## 6.0 CERTIFICATION

All sampling plans, sample collection procedures, extraction procedures and instrument/chemical analysis procedures used to assess and characterize PCB contamination at the cleanup site are contained in this report and are on file at the location designated in the certificate and at the Site during remediation operations. They are available for EPA inspection at either location.

Files are located at the following location:

**Town of Chelmsford**  
**Town Manager's office**  
**27 Katrina Road**  
**Chelmsford, MA**

Under civil and criminal penalties of the law for the making or submission of false or fraudulent statements or representations (18 USC 1001 and 15 USC 2615) I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify the truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instruction, made verification that the information is true, accurate and complete.

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Signature and Printed Name of Property Owner

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Date

---

Signature and Printed Name of Party Conducting Cleanup

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Date

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# **T A B L E S**

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**TABLE 1**  
Summary of PCB Analytical Results  
Former Silicon Transistor Corporation  
27 Katrina Rd, Chelmsford, Ma

Sample ID	Max PCB	Sample Matrix	Sample Location
Caluk Seam 10-11	<b>91,300</b>	Expansion Joint Caulking	Between precast panels 10 and 11
Caulk Seam 80-81	<b>66,600</b>	Expansion Joint Caulking	Between precast panels 80 and 81
Caulk Seam 103	<b>44,300</b>	Expansion Joint Caulking	Between precast panels 103 and block wall
PCB 1	<b>66,000</b>	Expansion Joint Caulking	Between precast panels on south side of building
PCB 2	<b>81,000</b>	Expansion Joint Caulking	Between precast panels on south side of building
PCB 3	<b>55,000</b>	Expansion Joint Caulking	Between precast panels on north side of building
PCB 4	<b>6.8</b>	Roof Sill Caulking	Below roof sill on west side of building
PCB 5	<b>1,700</b>	Roof Sill Caulking	Below roof sill on west side of building
Seam 11-15 @ 2-3"	<b>1.25</b>	Concrete Dust	edge of precast wall panels
Seam 27-30 @ 4-5"	0.103	Concrete Dust	edge of precast wall panels
Seam 30-33 @ 2-3"	0.233	Concrete Dust	edge of precast wall panels
Seam 41-43 @ 4-5"	0.0739	Concrete Dust	edge of precast wall panels
Seam 74-76 @ 2-3"	0.137	Concrete Dust	edge of precast wall panels
Seam 99-101 @ 4-5"	0.104	Concrete Dust	edge of precast wall panels
Seam 103/block @ 2-3"	<b>1.21</b>	Concrete Dust	edge of precast wall panels
Soil Panel 0-1	<b>2.40</b>	Soil	Below caulking between block wall and panel 1
Soil Panel 11-12	<b>5.68</b>	Soil	Below caulking between panels 11 and 12
Soil Panel 32-33	<b>21.6</b>	Soil	Below caulking between panels 32 and 33
Soil Panel 37-38	<b>8.80</b>	Soil	Below caulking between panels 37 and 38
Soil Panel 50-51	<b>10.4</b>	Soil	Below caulking between panels 50 and 51
Soil Panel 69-70	<b>9.80</b>	Soil	Below caulking between panels 69 and 70
Soil Panel 80-82	<b>4.64</b>	Soil	Below caulking between panels 80 and 82
Soil Panel 90-92	<b>9.50</b>	Soil	Below caulking between panels 90 and 92
Soil Panel 97-99	<b>5.82</b>	Soil	Below caulking between panels 97 and 99
Soil Panel 103/block	<b>3.45</b>	Soil	Below caulking between panel 103 and block wall
Interior Floor South 3-5	0.125	Concrete Dust	South side of concrete slab floor
Interior Floor Southeast 39-42	0.178	Concrete Dust	Southeast corner of concrete slab floor
Interior Floor East 69-72	0.230	Concrete Dust	East side of concrete slab floor
Interior Floor North 90-93	0.150	Concrete Dust	North side of concrete slab floor
Interior Floor North 100-103	0.200	Concrete Dust	Northwest corner of concrete slab floor
Interior Floor West Laydown	0.102	Concrete Dust	West side of concrete slab floor

**Notes:**

Results are reported in ppm

**Bold results are above the 1 ppm clean-up threshold**

**Bold and Shaded results are above the 50 ppm hazardous waste threshold**

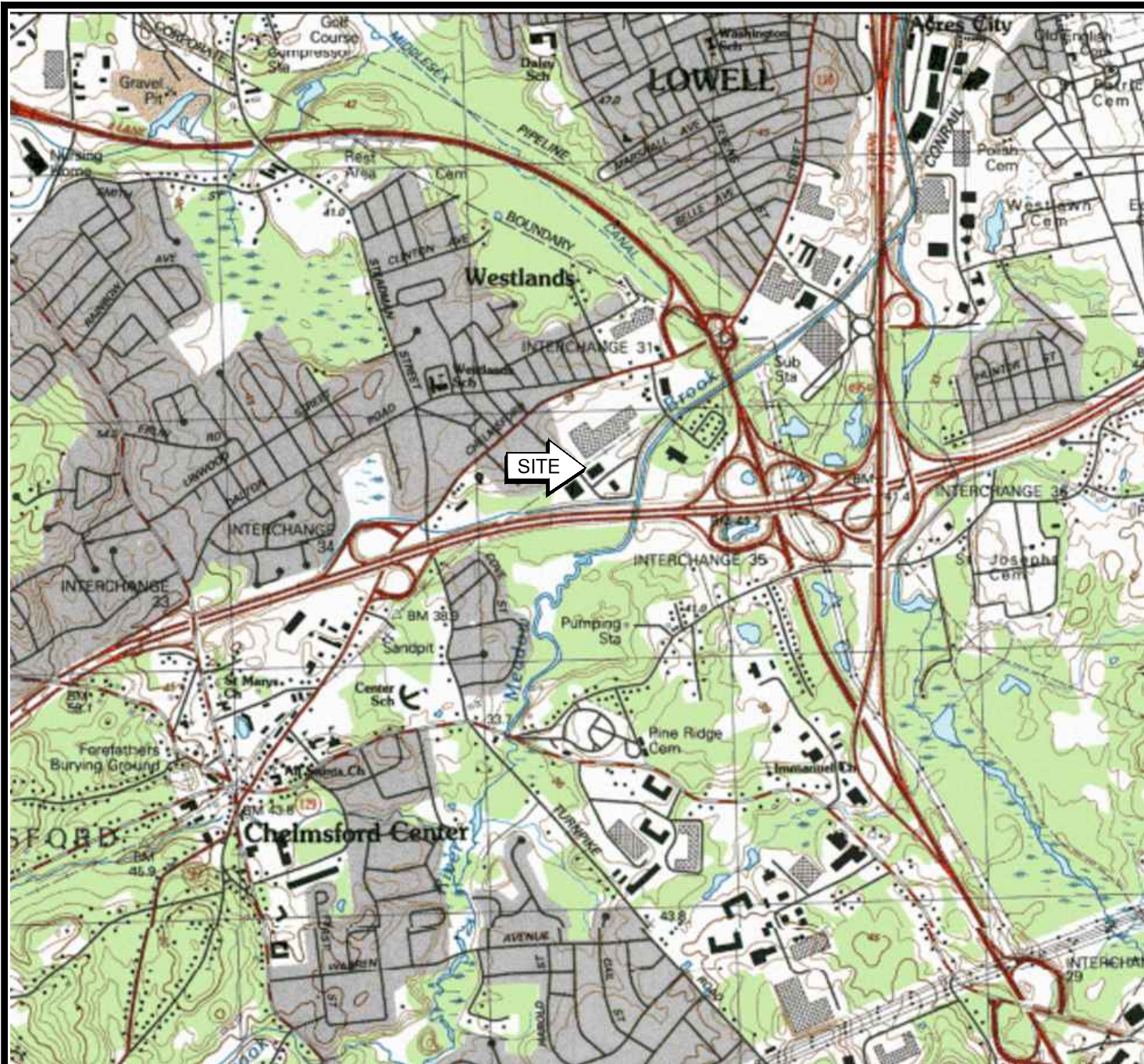
Samples PCB-1 through PCB-5 were collected by Nobis Engineering Inc., all other samples were collected by JTS Group, Inc.

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## **F I G U R E S**



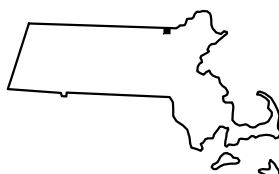


USGS TOPOGRAPHIC MAP  
BILLERICA, MASSACHUSETTS  
1987

APPROXIMATE SCALE  
1 INCH = 2,000 FEET



*Engineering a Sustainable Future*  
Nobis Engineering, Inc.  
585 Middlesex Street  
Lowell, Massachusetts 01851  
Tel (978) 683-0891  
Fax (978) 683-0966  
www.nobiseng.com



QUADRANGLE LOCATION

## FIGURE 1

LOCUS PLAN  
FORMER SILICON TRANSISTOR  
CORPORATION PROPERTY

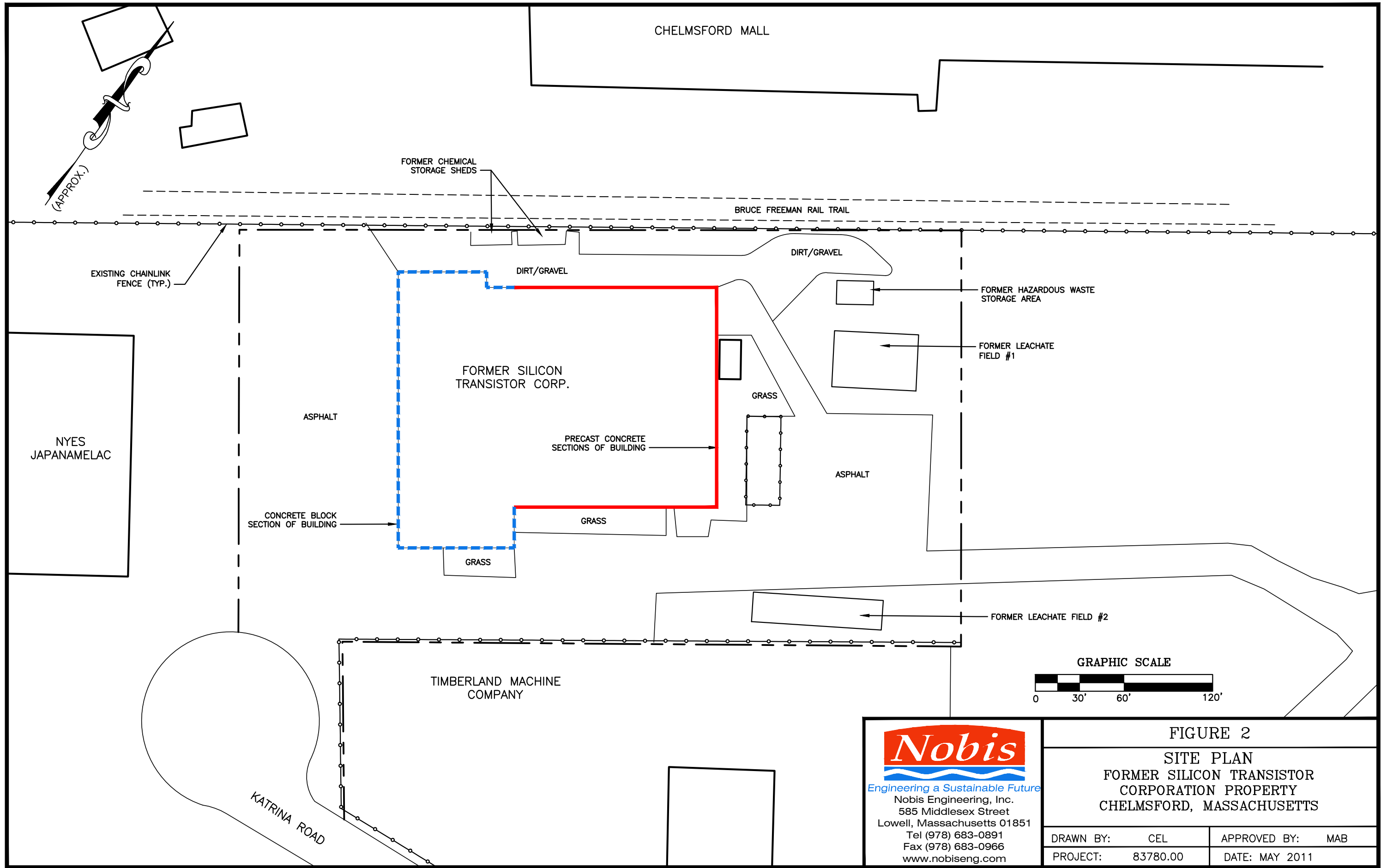
CHELMSFORD, MASSACHUSETTS

PROJECT: 83780.00

MAY 2011



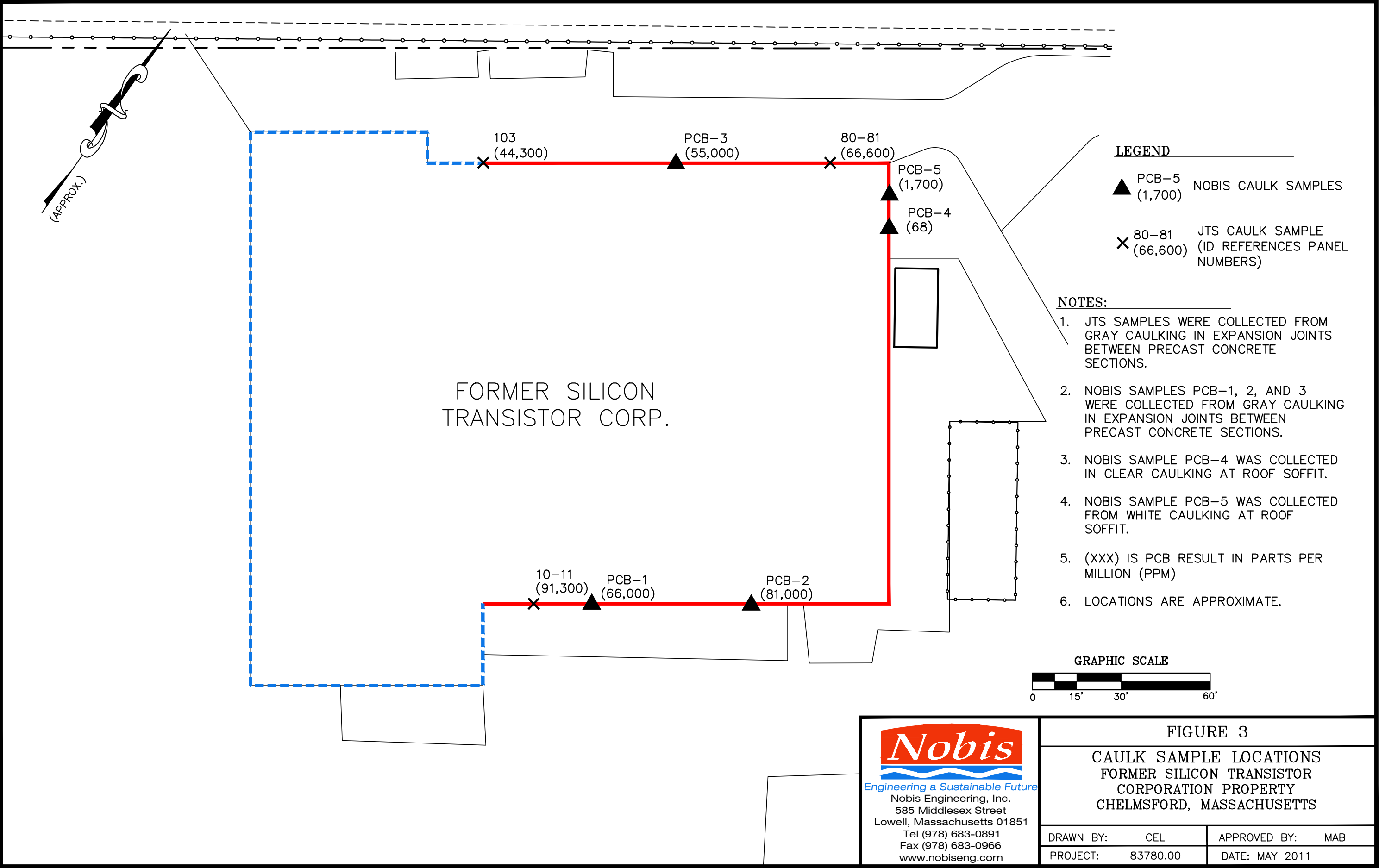
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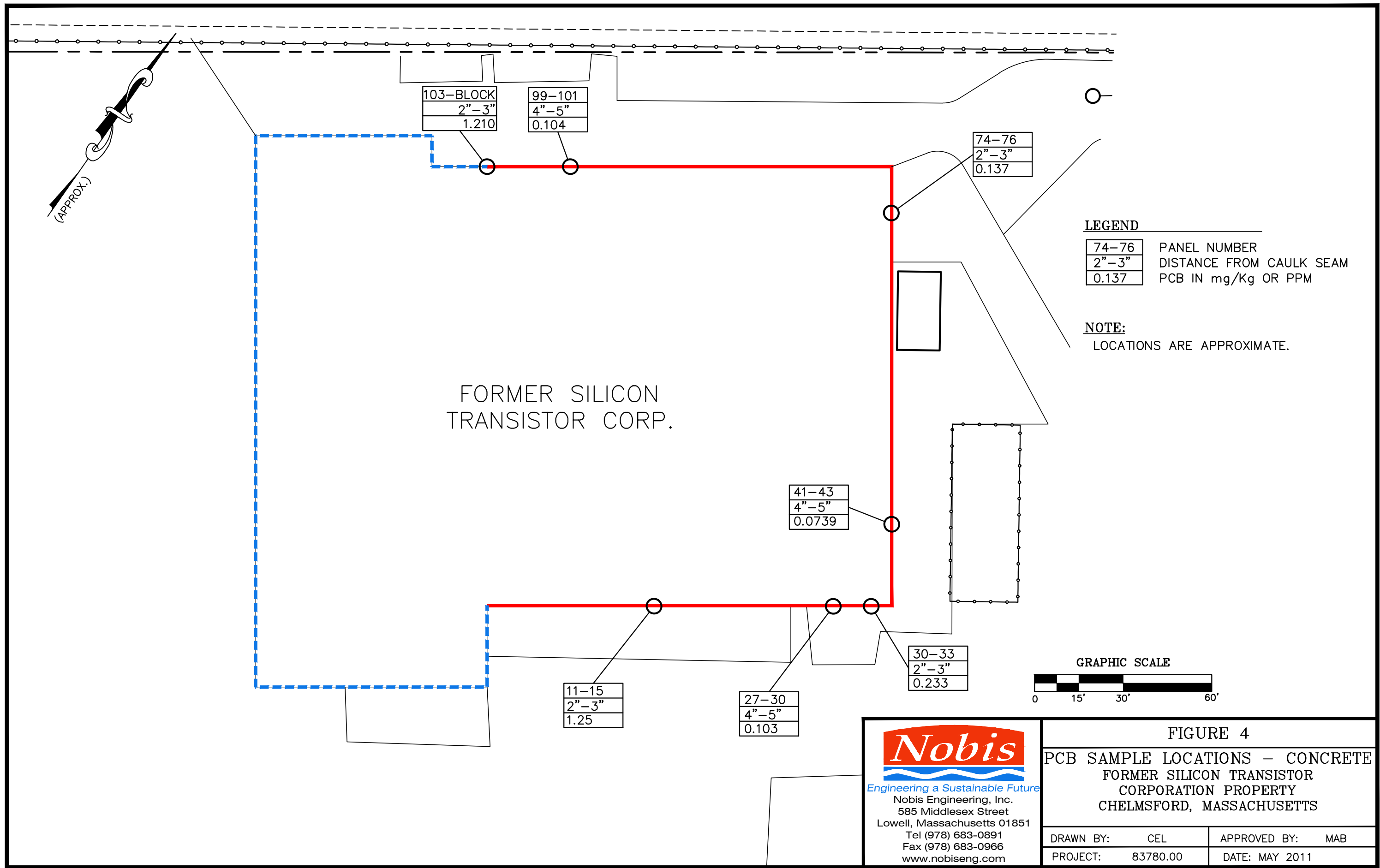


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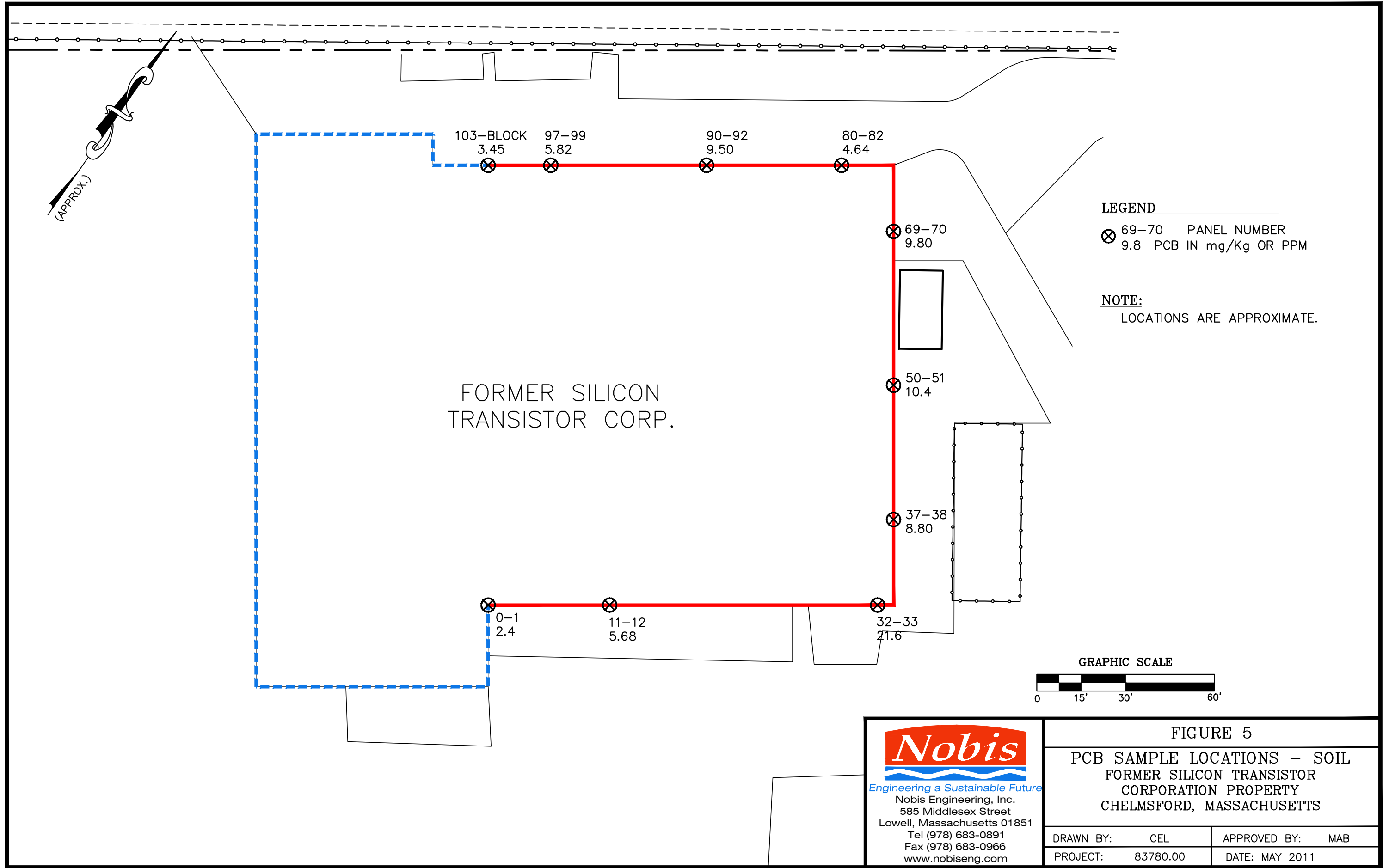
FIGURE 2			
SITE PLAN FORMER SILICON TRANSISTOR CORPORATION PROPERTY CHELMSFORD, MASSACHUSETTS			
DRAWN BY:	CEL	APPROVED BY:	MAB
PROJECT:	83780.00	DATE:	MAY 2011

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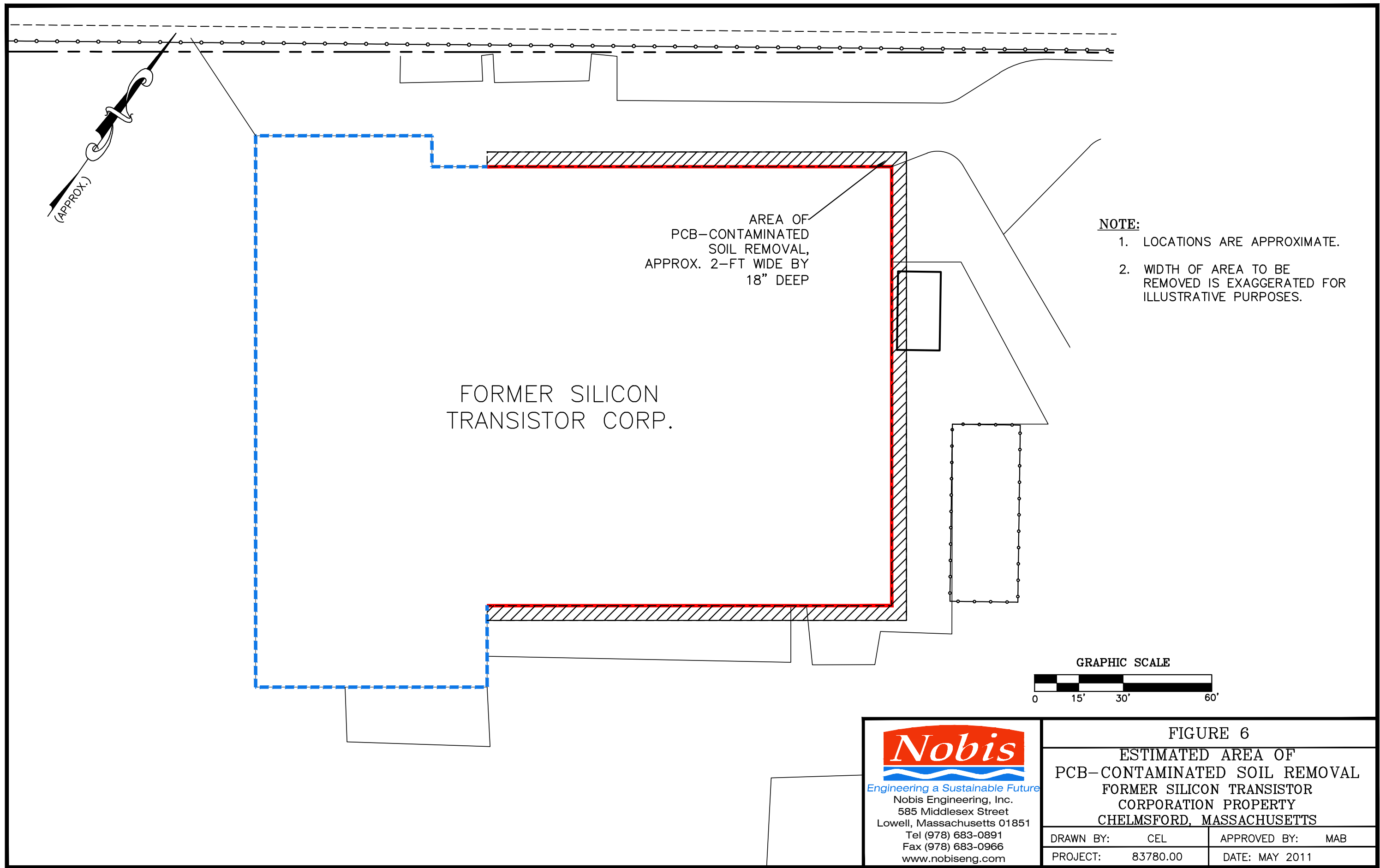





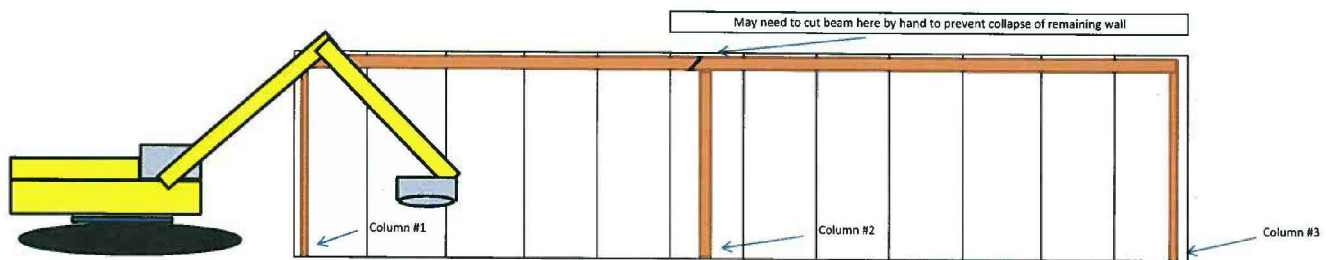
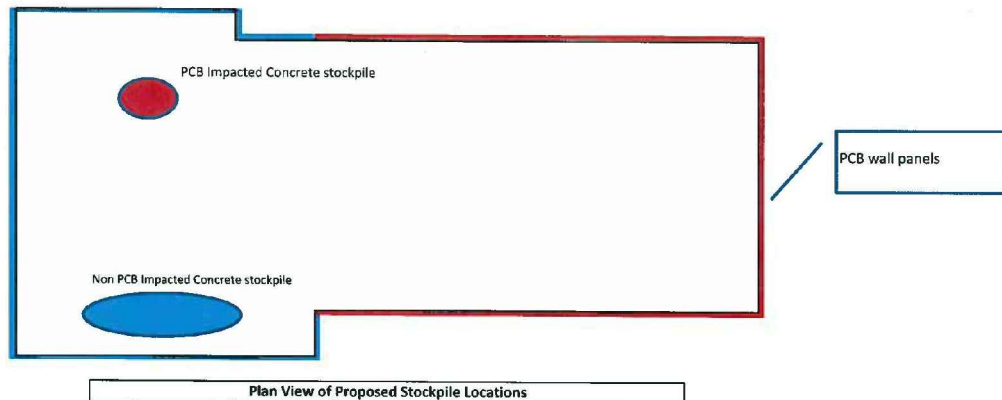
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 <b>Nobis</b> <i>Engineering a Sustainable Future</i> Nobis Engineering, Inc. 585 Middlesex Street Lowell, Massachusetts 01851 Tel (978) 683-0891 Fax (978) 683-0966 www.nobiseng.com	<b>FIGURE 6</b>	
	<b>ESTIMATED AREA OF PCB-CONTAMINATED SOIL REMOVAL FORMER SILICON TRANSISTOR CORPORATION PROPERTY CHELMSFORD, MASSACHUSETTS</b>	
	<b>DRAWN BY:</b> CEL	<b>APPROVED BY:</b> MAB
	<b>PROJECT:</b> 83780.00	<b>DATE:</b> MAY 2011



**Procedure:**

- \* Excavator demolishes Non-PCB (CMU) portion of building prior to beginning PCB Demolition/Remediation
- \* All debris from Non-PCB impacted portion of Demolition is removed from building slab area
- \* Excavator demolishes middle bays (area between columns starting at center of structure working toward outside walls
- \* Roof deck, bar joist and interior steel framing is carefully removed from column line #1 to column line #2 - leaving outside column line intact
- \* Perimeter beam is hand torch cut as shown in illustration above to pre weaken area
- \* Excavator placed demolition grapple outside of Concrete panel wall and "pulls" wall and perimeter beam inward on to floor slab
- \* PCB edging is segregated on the slab by second excavator with hydraulic hammer
- \* Third hydraulic excavator equipped with a bucket picks up both PCB & Non-PCB concrete debris and stockpiles in Separate areas as shown in upper illustration
- \* Third hydraulic excavator equipped with a bucket is used to load both PCB and NON-PCB Concrete (bucket will be decontaminated in accordance with work plan before loading cl
- \* Demolition procedure repeats at column line #2 and proceeds to column line #3 in the same fashion as described above
- \* Third hydraulic excavator equipped with a bucket is used to load both PCB and NON-PCB Concrete (bucket will be decontaminated in accordance with work plan before loading cl

NOTE: SKETCH PROVIDED BY S&R CORP.

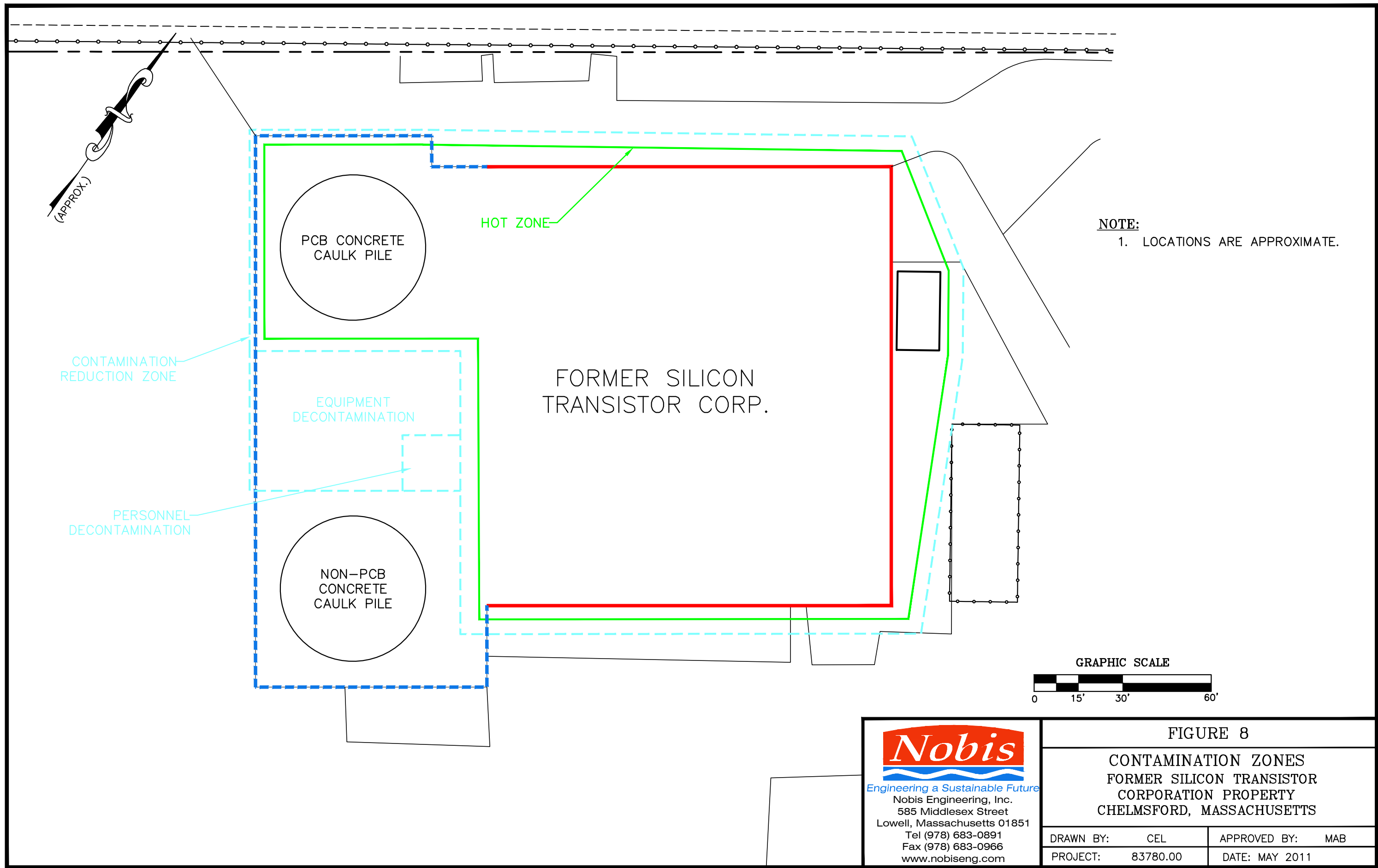
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**FIGURE 7**

**PRECAST CONCRETE SECTION  
 DEMOLITION DETAILS  
 FORMER SILICON TRANSISTOR  
 CORPORATION PROPERTY  
 CHELMSFORD, MASSACHUSETTS**

DRAWN BY: CEL	APPROVED BY: MAB
PROJECT: 83780.00	DATE: MAY 2011

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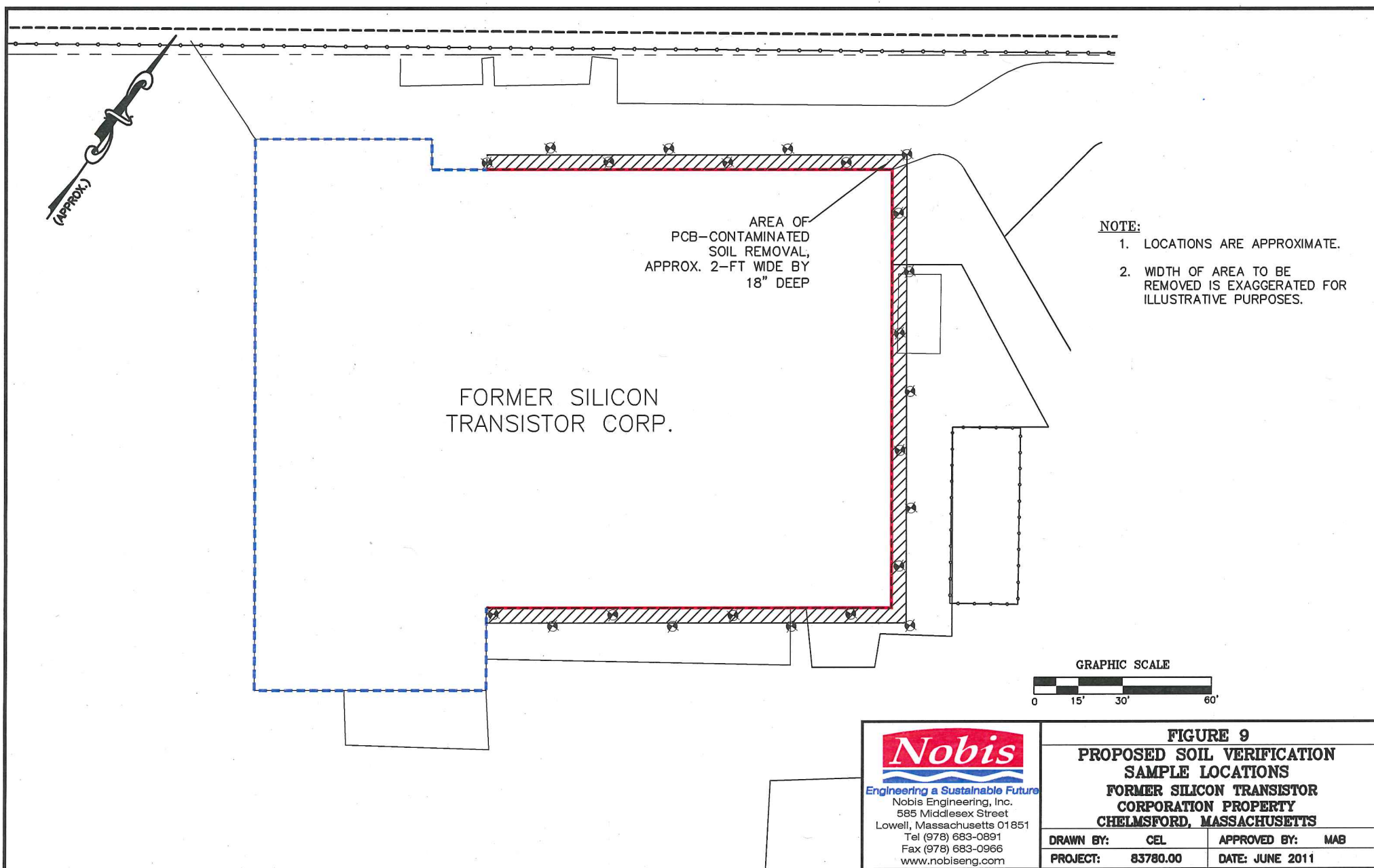






Photo 1: Southern Portion of the Building.



Photo 2: Eastern Portion of the Building



Photo 3: Northern Portion of the Building.



Photo 4: End of Precast Concrete Northern Side



Photo 5: End of Precast Concrete Southern Side.



Photo 6: Precast Concrete Sections showing Expansion Joints



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## PHOTOSHEET 1

### SITE PHOTOGRAPHS

FORMER STC SITE

27 Katrina Road  
Chelmsford, Massachusetts

PROJECT 83780

JUNE 2011





Photo 7: View of panel concrete sampling locations.




Photo 8: View of expansion joint sampling location.



Photo 9: View 1 of expansion joint caulking and soil sampling location.



Photo 10: View 2 of expansion joint caulking and soil sampling location.

 <p>Nobis Engineering, Inc. 585 Middlesex Street Lowell, Massachusetts Tel (978) 683-0891 Fax (978) 683-0966</p>	PHOTOSHEET 2	
	SITE PHOTOGRAPHS FORMER STC SITE 27 Katrina Road Chelmsford, Massachusetts	
	PROJECT 83780	JUNE 2011

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# A P P E N D I C E S

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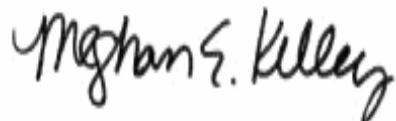
March 4, 2011

Marc Bouvier  
Nobis Engineering  
585 Middlesex Street  
Lowell, MA 01851

Project Location: Katrina Rd., Chemsford  
Client Job Number:  
Project Number: 83780  
Laboratory Work Order Number: 11C0080

Enclosed are results of analyses for samples received by the laboratory on March 3, 2011. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Meghan E. Kelley  
Project Manager



Nobis Engineering  
585 Middlesex Street  
Lowell, MA 01851  
ATTN: Marc Bouvier

REPORT DATE: 3/4/2011

PURCHASE ORDER NUMBER: MO-10-008

PROJECT NUMBER: 83780

**ANALYTICAL SUMMARY**

---

WORK ORDER NUMBER: 11C0080

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Katrina Rd., Chelmsford

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PCB-1	11C0080-01	Caulk		SW-846 8082	
PCB-2	11C0080-02	Caulk		SW-846 8082	
PCB-3	11C0080-03	Caulk		SW-846 8082	
PCB-4	11C0080-04	Caulk		SW-846 8082	
PCB-5	11C0080-05	Caulk		SW-846 8082	

## CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

**SW-846 8082**

### Qualifications:

---

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

### Analyte & Samples(s) Qualified:

**Decachlorobiphenyl, Decachlorobiphenyl [2C], Tetrachloro-m-xylene, Tetrachloro-m-xylene [2C]**

11C0080-01[PCB-1], 11C0080-02[PCB-2], 11C0080-03[PCB-3], 11C0080-05[PCB-5]

---

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Daren J. Damboragian  
Laboratory Manager

Project Location: Katrina Rd., Chemsford

Sample Description:

Work Order: 11C0080

Date Received: 3/3/2011

Sampled: 3/2/2011 12:15

Field Sample #: PCB-1

Sample ID: 11C0080-01

Sample Matrix: Caulk

### Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	8400	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:38	PJG
Aroclor-1221 [1]	ND	8400	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:38	PJG
Aroclor-1232 [1]	ND	8400	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:38	PJG
Aroclor-1242 [1]	ND	8400	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:38	PJG
Aroclor-1248 [1]	ND	8400	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:38	PJG
Aroclor-1254 [2]	66000	8400	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:38	PJG
Aroclor-1260 [1]	ND	8400	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:38	PJG
Aroclor-1262 [1]	ND	8400	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:38	PJG
Aroclor-1268 [1]	ND	8400	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:38	PJG
Surrogates	% Recovery	Recovery Limits			Flag				
Decachlorobiphenyl [1]	*	30-150			S-01			3/4/11 14:38	
Decachlorobiphenyl [2]	*	30-150			S-01			3/4/11 14:38	
Tetrachloro-m-xylene [1]	*	30-150			S-01			3/4/11 14:38	
Tetrachloro-m-xylene [2]	*	30-150			S-01			3/4/11 14:38	

Project Location: Katrina Rd., Chemsford

Sample Description:

Work Order: 11C0080

Date Received: 3/3/2011

Field Sample #: PCB-2

Sampled: 3/2/2011 12:20

Sample ID: 11C0080-02

Sample Matrix: Caulk

### Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	8500	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:54	PJG
Aroclor-1221 [1]	ND	8500	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:54	PJG
Aroclor-1232 [1]	ND	8500	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:54	PJG
Aroclor-1242 [1]	ND	8500	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:54	PJG
Aroclor-1248 [1]	ND	8500	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:54	PJG
Aroclor-1254 [2]	81000	8500	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:54	PJG
Aroclor-1260 [1]	ND	8500	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:54	PJG
Aroclor-1262 [1]	ND	8500	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:54	PJG
Aroclor-1268 [1]	ND	8500	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 14:54	PJG
Surrogates	% Recovery	Recovery Limits			Flag				
Decachlorobiphenyl [1]	*	30-150			S-01			3/4/11 14:54	
Decachlorobiphenyl [2]	*	30-150			S-01			3/4/11 14:54	
Tetrachloro-m-xylene [1]	*	30-150			S-01			3/4/11 14:54	
Tetrachloro-m-xylene [2]	*	30-150			S-01			3/4/11 14:54	



Project Location: Katrina Rd., Chemsford

Sample Description:

Work Order: 11C0080

Date Received: 3/3/2011

Field Sample #: PCB-3

Sampled: 3/2/2011 12:30

Sample ID: 11C0080-03

Sample Matrix: Caulk

### Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	8800	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 15:10	PJG
Aroclor-1221 [1]	ND	8800	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 15:10	PJG
Aroclor-1232 [1]	ND	8800	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 15:10	PJG
Aroclor-1242 [1]	ND	8800	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 15:10	PJG
Aroclor-1248 [1]	ND	8800	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 15:10	PJG
Aroclor-1254 [2]	55000	8800	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 15:10	PJG
Aroclor-1260 [1]	ND	8800	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 15:10	PJG
Aroclor-1262 [1]	ND	8800	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 15:10	PJG
Aroclor-1268 [1]	ND	8800	mg/Kg	50000		SW-846 8082	3/3/11	3/4/11 15:10	PJG
Surrogates	% Recovery	Recovery Limits			Flag				
Decachlorobiphenyl [1]	*	30-150			S-01			3/4/11 15:10	
Decachlorobiphenyl [2]	*	30-150			S-01			3/4/11 15:10	
Tetrachloro-m-xylene [1]	*	30-150			S-01			3/4/11 15:10	
Tetrachloro-m-xylene [2]	*	30-150			S-01			3/4/11 15:10	

Project Location: Katrina Rd., Chemsford

Sample Description:

Work Order: 11C0080

Date Received: 3/3/2011

Field Sample #: PCB-4

Sampled: 3/3/2011 08:20

Sample ID: 11C0080-04

Sample Matrix: Caulk

### Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	2.0	mg/Kg	10		SW-846 8082	3/3/11	3/4/11 15:57	PJG
Aroclor-1221 [1]	ND	2.0	mg/Kg	10		SW-846 8082	3/3/11	3/4/11 15:57	PJG
Aroclor-1232 [1]	ND	2.0	mg/Kg	10		SW-846 8082	3/3/11	3/4/11 15:57	PJG
Aroclor-1242 [1]	ND	2.0	mg/Kg	10		SW-846 8082	3/3/11	3/4/11 15:57	PJG
Aroclor-1248 [1]	ND	2.0	mg/Kg	10		SW-846 8082	3/3/11	3/4/11 15:57	PJG
Aroclor-1254 [1]	6.8	2.0	mg/Kg	10		SW-846 8082	3/3/11	3/4/11 15:57	PJG
Aroclor-1260 [1]	ND	2.0	mg/Kg	10		SW-846 8082	3/3/11	3/4/11 15:57	PJG
Aroclor-1262 [1]	ND	2.0	mg/Kg	10		SW-846 8082	3/3/11	3/4/11 15:57	PJG
Aroclor-1268 [1]	ND	2.0	mg/Kg	10		SW-846 8082	3/3/11	3/4/11 15:57	PJG
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	91.0	30-150							
Decachlorobiphenyl [2]	86.2	30-150							
Tetrachloro-m-xylene [1]	102	30-150							
Tetrachloro-m-xylene [2]	102	30-150							

Project Location: Katrina Rd., Chemsford

Sample Description:

Work Order: 11C0080

Date Received: 3/3/2011

Field Sample #: PCB-5

Sampled: 3/3/2011 08:25

Sample ID: 11C0080-05

Sample Matrix: Caulk

### Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	170	mg/Kg	1000		SW-846 8082	3/3/11	3/4/11 15:41	PJG
Aroclor-1221 [1]	ND	170	mg/Kg	1000		SW-846 8082	3/3/11	3/4/11 15:41	PJG
Aroclor-1232 [1]	ND	170	mg/Kg	1000		SW-846 8082	3/3/11	3/4/11 15:41	PJG
Aroclor-1242 [1]	ND	170	mg/Kg	1000		SW-846 8082	3/3/11	3/4/11 15:41	PJG
Aroclor-1248 [1]	ND	170	mg/Kg	1000		SW-846 8082	3/3/11	3/4/11 15:41	PJG
Aroclor-1254 [2]	1700	170	mg/Kg	1000		SW-846 8082	3/3/11	3/4/11 15:41	PJG
Aroclor-1260 [1]	ND	170	mg/Kg	1000		SW-846 8082	3/3/11	3/4/11 15:41	PJG
Aroclor-1262 [1]	ND	170	mg/Kg	1000		SW-846 8082	3/3/11	3/4/11 15:41	PJG
Aroclor-1268 [1]	ND	170	mg/Kg	1000		SW-846 8082	3/3/11	3/4/11 15:41	PJG
Surrogates	% Recovery	Recovery Limits			Flag				
Decachlorobiphenyl [1]	*	30-150			S-01			3/4/11 15:41	
Decachlorobiphenyl [2]	*	30-150			S-01			3/4/11 15:41	
Tetrachloro-m-xylene [1]	*	30-150			S-01			3/4/11 15:41	
Tetrachloro-m-xylene [2]	*	30-150			S-01			3/4/11 15:41	

### Sample Extraction Data

Prep Method: SW-846 3540C-SW-846 8082

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
11C0080-01 [PCB-1]	B026819	0.597	10.0	03/03/11
11C0080-02 [PCB-2]	B026819	0.585	10.0	03/03/11
11C0080-03 [PCB-3]	B026819	0.568	10.0	03/03/11
11C0080-04 [PCB-4]	B026819	0.509	10.0	03/03/11
11C0080-05 [PCB-5]	B026819	0.587	10.0	03/03/11

**QUALITY CONTROL**
**Polychlorinated Biphenyls By GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B026819 - SW-846 3540C**
**Blank (B026819-BLK1)**

Prepared: 03/03/11 Analyzed: 03/04/11

Aroclor-1016	ND	0.20	mg/Kg							
Aroclor-1016 [2C]	ND	0.20	mg/Kg							
Aroclor-1221	ND	0.20	mg/Kg							
Aroclor-1221 [2C]	ND	0.20	mg/Kg							
Aroclor-1232	ND	0.20	mg/Kg							
Aroclor-1232 [2C]	ND	0.20	mg/Kg							
Aroclor-1242	ND	0.20	mg/Kg							
Aroclor-1242 [2C]	ND	0.20	mg/Kg							
Aroclor-1248	ND	0.20	mg/Kg							
Aroclor-1248 [2C]	ND	0.20	mg/Kg							
Aroclor-1254	ND	0.20	mg/Kg							
Aroclor-1254 [2C]	ND	0.20	mg/Kg							
Aroclor-1260	ND	0.20	mg/Kg							
Aroclor-1260 [2C]	ND	0.20	mg/Kg							
Aroclor-1262	ND	0.20	mg/Kg							
Aroclor-1262 [2C]	ND	0.20	mg/Kg							
Aroclor-1268	ND	0.20	mg/Kg							
Aroclor-1268 [2C]	ND	0.20	mg/Kg							
Surrogate: Decachlorobiphenyl	4.34		mg/Kg	4.00		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	3.97		mg/Kg	4.00		99.3	30-150			
Surrogate: Tetrachloro-m-xylene	4.87		mg/Kg	4.00		122	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	4.25		mg/Kg	4.00		106	30-150			

**LCS (B026819-BS1)**

Prepared: 03/03/11 Analyzed: 03/04/11

Aroclor-1016	4.1	0.20	mg/Kg	4.00		102	40-140			
Aroclor-1016 [2C]	3.5	0.20	mg/Kg	4.00		87.3	40-140			
Aroclor-1260	3.6	0.20	mg/Kg	4.00		89.1	40-140			
Aroclor-1260 [2C]	3.4	0.20	mg/Kg	4.00		83.9	40-140			
Surrogate: Decachlorobiphenyl	3.72		mg/Kg	4.00		93.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	3.45		mg/Kg	4.00		86.1	30-150			
Surrogate: Tetrachloro-m-xylene	4.25		mg/Kg	4.00		106	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.77		mg/Kg	4.00		94.3	30-150			

**LCS Dup (B026819-BSD1)**

Prepared: 03/03/11 Analyzed: 03/04/11

Aroclor-1016	3.9	0.20	mg/Kg	4.00		98.5	40-140	3.37	30	
Aroclor-1016 [2C]	3.4	0.20	mg/Kg	4.00		85.2	40-140	2.46	30	
Aroclor-1260	3.6	0.20	mg/Kg	4.00		89.5	40-140	0.450	30	
Aroclor-1260 [2C]	3.4	0.20	mg/Kg	4.00		85.3	40-140	1.68	30	
Surrogate: Decachlorobiphenyl	3.74		mg/Kg	4.00		93.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	3.52		mg/Kg	4.00		87.9	30-150			
Surrogate: Tetrachloro-m-xylene	4.44		mg/Kg	4.00		111	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.92		mg/Kg	4.00		98.1	30-150			

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

**CERTIFICATIONS****Certified Analyses included in this Report****Analyte****Certifications****No certified Analyses included in this Report**

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	American Industrial Hygiene Association	100033	01/1/2012
MA	Massachusetts DEP	M-MA100	06/30/2011
CT	Connecticut Department of Public Health	PH-0567	09/30/2011
NY	New York State Department of Health	10899 NELAP	04/1/2011
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2012
RI	Rhode Island Department of Health	LAO00112	12/30/2011
NC	North Carolina Div. of Water Quality	652	12/31/2011
NJ	New Jersey DEP	MA007 NELAP	06/30/2011
FL	Florida Department of Health	E871027 NELAP	06/30/2011
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2011
WA	State of Washington Department of Ecology	C2065	02/23/2012



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ANALYTICAL LABORATORY

Phone: 413-525-2332  
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www.contestlabs.com

## CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Longmeadow, MA 01028

Page 1 of 14

Company Name: Nobis Engineering

Telephone: 978-683-0891

Address: 585 Middlesex Street

Project # 83780

Attention: Marie Babin

Client PO#

Project Location: Kathrine Bond Chelmsford

DATA DELIVERY (check all that apply)  
☐ FAX ☐ EMAIL ☐ WEBSITE

Sampled By: Jeff Brunelle

Fax #

Email: myan@nobiseng.com

Project Proposal Provided? (for billing purposes)  
☐ Yes ☐ No

Format:

OPDF CEXCEL OGIS  
☐ OTHER

Con-Test Lab ID (laboratory use only)

Beginning Date/Time

Ending Date/Time

Composite

Grab

Matrix Code

Date Code

Enhanced Data Package

Matrix Code

Date Code

Enhanced Data Package

Client Sample ID / Description

Collection

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COMPLETELY OR IS INCORRECT. TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED

DATE OF PRINTING MAY VARY. PLEASE PRINT DATE OF PRINTING IN THE SPACE PROVIDED

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COMPLETELY OR IS INCORRECT. TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED

DATE OF PRINTING MAY VARY. PLEASE PRINT DATE





# Sample Receipt Checklist

CLIENT NAME: NobisRECEIVED BY: CECDATE: 3/3/11

1) Was the chain(s) of custody relinquished and signed?

Yes ☒ No ☐

2) Does the chain agree with the samples?

Yes ☒ No ☐

If not, explain:

3) Are all the samples in good condition?

Yes ☒ No ☐

If not, explain:

4) How were the samples received:

On Ice ☒Direct from Sampling ☐Ambient ☐In Cooler(s) ☒Were the samples received in Temperature Compliance of (2-6°C)? Yes ☐ No ☐ N/A ☐Temperature °C by Temp blank 2.0°C

Temperature °C by Temp gun \_\_\_\_\_

5) Are there Dissolved samples for the lab to filter?

Yes ☐ No ☒

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

6) Are there any samples "On Hold"?

Yes ☐ No ☒Stored where: 

7) Are there any RUSH or SHORT HOLDING TIME samples?

Yes ☐ No ☐

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

8) Location where samples are stored:

19
 Permission to subcontract samples? Yes ☐ No ☐  
 (Walk-in clients only) if not already approved  
 Client Signature: \_\_\_\_\_

## Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Other glass jar	
500 mL Plastic		Plastic Bag / Ziploc	<u>5</u>
250 mL plastic		Air Cassette	
40 mL Vial - type listed below		SOC Kit	
Colisure / bacteria bottle		Tubes	
Dissolved Oxygen bottle		Non-ConTest Container	
Flashpoint bottle		Other	
Encore		PM 2.5 / PM 10	
Perchlorate Kit		PUF Cartridge	

Laboratory Comments:

 40 mL vials: # HCl \_\_\_\_\_ # Methanol \_\_\_\_\_  
 # Bisulfate \_\_\_\_\_ # DI Water \_\_\_\_\_  
 # Thiosulfate \_\_\_\_\_ Unpreserved \_\_\_\_\_

Time and Date Frozen:

Do all samples have the proper Acid pH: Yes ☐ No ☐ N/A ☐Do all samples have the proper Base pH: Yes ☐ No ☐ N/A ☐

## ANALYTICAL REPORT

Thursday, April 14, 2011

Jeff Dill  
JTS Group, Inc.  
74 William St  
Worcester, MA 01609

GeoLabs, Inc.  
45 Johnson Lane  
Braintree MA 02184  
Tele: 781 848 7844  
Fax: 781 848 7811

TEL: (508) 791-3775  
FAX: (508) 798-9134

Project: 25 Katrina Rd  
Location: Chelmsford

Order No.: 1104010

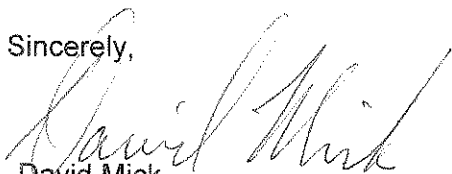
Dear Jeff Dill:

GeoLabs, Inc. received 26 sample(s) on 3/31/2011 for the analyses presented in the following report.

**Report is being re-issued with MS/MSD and total solid results.** All data for associated QC met method or laboratory specifications, except when noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



David Mick  
Laboratory Director

For current certifications, please visit our website at [www.geolabs.com](http://www.geolabs.com)

### Certifications:

CT (PH-0148) - MA (M-MA015) - ME (MA0015) - NH (2508) - NJ (MA009) - PA (68-03417) - RI (LA000252)  
Accredited in Accordance with NELAC

Date: 14-Apr-11

CLIENT: JTS Group, Inc.  
Project: 25 Katrina Rd  
Lab Order: 1104010

## CASE NARRATIVE

### Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

### Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

### Analysis of Sample(s)

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure.

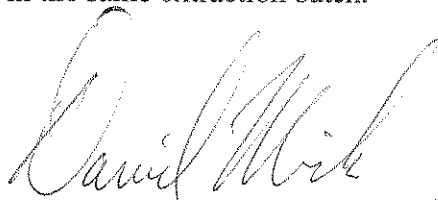
The following analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples:

Samples 008-010 surrogates diluted out of sample.

MS/MSD Batch 17803 has high spike recoveries due to matrix interference. RPD is outside of recovery limits.

MS/MSD Batch 17802 were not done for the samples included in this report, however were done on samples that were in the same extraction batch.

SIGNATURE:



LAB DIRECTOR

PRINTED NAME: David Mick

DATE: April 14, 2011

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-001 Collection Date: 3/30/2011 10:15:00 AM  
Client Sample ID: Seams 11-15 @ 2"-3" Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	1.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:21:36 AM

Aroclor 1016	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1254	1250	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	50.5	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	93.9	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	101	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	95.1	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	78.4	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

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CLIENT:	JTS Group, Inc.	Lab Order:	1104010
Project:	25 Katrina Rd		

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Lab ID:	1104010-002	Collection Date:	3/30/2011 10:37:00 AM
Client Sample ID:	Seams 30-33 @ 2"-3"	Matrix:	CONCRETE DUST

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Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

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Percent Moisture	2.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:21:36 AM

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Aroclor 1016	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1254	233	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	51.0	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	97.3	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	106	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	95.2	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	78.0	30-150	%REC	1	4/5/2011

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Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

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GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-003 Collection Date: 3/30/2011 10:56:00 AM  
Client Sample ID: Seams 74-76 @ 2"-3" Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	1.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:21:36 AM

Aroclor 1016	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1254	137	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	50.5	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	109	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	112	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	100	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	81.0	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-004 Collection Date: 3/30/2011 11:17:00 AM  
Client Sample ID: Seams 27-30 @ 4"-5" Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	1.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:21:36 AM

Aroclor 1016	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1254	103	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	50.5	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	109	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	108	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	105	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	84.2	30-150	%REC	1	4/5/2011

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-005 Collection Date: 3/30/2011 12:59:00 PM  
Client Sample ID: Seams 41-43 @ 4"-5" Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	2.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:21:36 AM

Aroclor 1016	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1254	73.9	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	51.0	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	99.3	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	97.9	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	96.2	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	76.5	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811



## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-006 Collection Date: 3/30/2011 1:27:00 PM

Client Sample ID: Seams 99-101 @ 4"-5" Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	2.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:21:36 AM

Aroclor 1016	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1254	104	51.0	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	51.0	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	108	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	111	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	102	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	81.3	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-007 Collection Date: 3/30/2011 1:55:00 PM  
Client Sample ID: Seam 103/Block @ 2"-3" Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	1.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1254	1210	50.5	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	50.5	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	102	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	127	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	97.2	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	113	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

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CLIENT:	JTS Group, Inc.	Lab Order:	1104010
Project:	25 Katrina Rd		

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Lab ID:	1104010-008	Collection Date:	3/30/2011 1:20:00 PM
Client Sample ID:	Caulk Seam 80-81	Matrix:	CAULKING

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Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

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Aroclor 1016	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1221	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1232	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1242	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1248	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1254	66600000	2500000		µg/Kg	50000	4/5/2011
Aroclor 1260	ND	2500000		µg/Kg	50000	4/5/2011
Surr: Decachlorobiphenyl Sig 1	0	30-150	S	%REC	50000	4/5/2011
Surr: Decachlorobiphenyl Sig 2	0	30-150	S	%REC	50000	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	0	30-150	S	%REC	50000	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	0	30-150	S	%REC	50000	4/5/2011

## NOTES:

Surrogates diluted out of sample.

Results calculated on wet weight basis

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Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11CLIENT: JTS Group, Inc.  
Project: 25 Katrina Rd

Lab Order: 1104010

Lab ID: 1104010-009

Collection Date: 3/30/2011 1:33:00 PM

Client Sample ID: Caulk Seam 103

Matrix: CAULKING

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1221	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1232	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1242	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1248	ND	2500000		µg/Kg	50000	4/5/2011
Aroclor 1254	44300000	2500000		µg/Kg	50000	4/5/2011
Aroclor 1260	ND	2500000		µg/Kg	50000	4/5/2011
Surr: Decachlorobiphenyl Sig 1	0	30-150	S	%REC	50000	4/5/2011
Surr: Decachlorobiphenyl Sig 2	0	30-150	S	%REC	50000	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	0	30-150	S	%REC	50000	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	0	30-150	S	%REC	50000	4/5/2011

## NOTES:

Surrogates diluted out of sample.

Results calculated on wet weight basis

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11CLIENT: JTS Group, Inc.  
Project: 25 Katrina Rd

Lab Order: 1104010

Lab ID: 1104010-010

Collection Date: 3/30/2011 2:28:00 PM

Client Sample ID: Caulk Seam 10-11

Matrix: CAULKING

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	5000000		µg/Kg	100000	4/5/2011
Aroclor 1221	ND	5000000		µg/Kg	100000	4/5/2011
Aroclor 1232	ND	5000000		µg/Kg	100000	4/5/2011
Aroclor 1242	ND	5000000		µg/Kg	100000	4/5/2011
Aroclor 1248	ND	5000000		µg/Kg	100000	4/5/2011
Aroclor 1254	91300000	5000000		µg/Kg	100000	4/5/2011
Aroclor 1260	ND	5000000		µg/Kg	100000	4/5/2011
Surr: Decachlorobiphenyl Sig 1	0	30-150	S	%REC	100000	4/5/2011
Surr: Decachlorobiphenyl Sig 2	0	30-150	S	%REC	100000	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	0	30-150	S	%REC	100000	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	0	30-150	S	%REC	100000	4/5/2011

## NOTES:

Surrogates diluted out of sample.

Results calculated on wet weight basis

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc.  
Project: 25 Katrina Rd

Lab Order: 1104010

Lab ID: 1104010-011

Collection Date: 3/30/2011 2:22:00 PM

Client Sample ID: Soil Panel 0-1

Matrix: SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	5.0	1.0		wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	263		µg/Kg-dry	5	4/5/2011
Aroclor 1221	ND	263		µg/Kg-dry	5	4/5/2011
Aroclor 1232	ND	263		µg/Kg-dry	5	4/5/2011
Aroclor 1242	ND	263		µg/Kg-dry	5	4/5/2011
Aroclor 1248	ND	263		µg/Kg-dry	5	4/5/2011
Aroclor 1254	2400	263		µg/Kg-dry	5	4/5/2011
Aroclor 1260	ND	263		µg/Kg-dry	5	4/5/2011
Surr: Decachlorobiphenyl Sig 1	103	30-150		%REC	5	4/5/2011
Surr: Decachlorobiphenyl Sig 2	54.0	30-150		%REC	5	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	95.6	30-150		%REC	5	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	89.1	30-150		%REC	5	4/5/2011

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11CLIENT: JTS Group, Inc.  
Project: 25 Katrina Rd

Lab Order: 1104010

Lab ID: 1104010-012  
Client Sample ID: Soil Panel 11-12Collection Date: 3/30/2011 10:00:00 AM  
Matrix: SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	6.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	266	µg/Kg-dry	5	4/5/2011
Aroclor 1221	ND	266	µg/Kg-dry	5	4/5/2011
Aroclor 1232	ND	266	µg/Kg-dry	5	4/5/2011
Aroclor 1242	ND	266	µg/Kg-dry	5	4/5/2011
Aroclor 1248	ND	266	µg/Kg-dry	5	4/5/2011
Aroclor 1254	5680	266	µg/Kg-dry	5	4/5/2011
Aroclor 1260	ND	266	µg/Kg-dry	5	4/5/2011
Surr: Decachlorobiphenyl Sig 1	101	30-150	%REC	5	4/5/2011
Surr: Decachlorobiphenyl Sig 2	33.4	30-150	%REC	5	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	97.1	30-150	%REC	5	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	83.5	30-150	%REC	5	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

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CLIENT:	JTS Group, Inc.	Lab Order:	1104010
Project:	25 Katrina Rd		

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Lab ID:	1104010-013	Collection Date:	3/30/2011 10:57:00 AM
Client Sample ID:	Soil Panel 32-33	Matrix:	SOIL

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Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

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Percent Moisture	11.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

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Aroclor 1016	ND	1120	µg/Kg-dry	20	4/5/2011
Aroclor 1221	ND	1120	µg/Kg-dry	20	4/5/2011
Aroclor 1232	ND	1120	µg/Kg-dry	20	4/5/2011
Aroclor 1242	ND	1120	µg/Kg-dry	20	4/5/2011
Aroclor 1248	ND	1120	µg/Kg-dry	20	4/5/2011
Aroclor 1254	21600	1120	µg/Kg-dry	20	4/5/2011
Aroclor 1260	ND	1120	µg/Kg-dry	20	4/5/2011
Surr: Decachlorobiphenyl Sig 1	126	30-150	%REC	20	4/5/2011
Surr: Decachlorobiphenyl Sig 2	119	30-150	%REC	20	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	108	30-150	%REC	20	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	96.7	30-150	%REC	20	4/5/2011

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Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

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GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811



## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

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**CLIENT:** JTS Group, Inc. **Lab Order:** 1104010  
**Project:** 25 Katrina Rd

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**Lab ID:** 1104010-014 **Collection Date:** 3/30/2011 11:56:00 AM  
**Client Sample ID:** Soil Panel 37-38 **Matrix:** SOIL

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Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	7.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	538	µg/Kg-dry	10	4/5/2011
Aroclor 1221	ND	538	µg/Kg-dry	10	4/5/2011
Aroclor 1232	ND	538	µg/Kg-dry	10	4/5/2011
Aroclor 1242	ND	538	µg/Kg-dry	10	4/5/2011
Aroclor 1248	ND	538	µg/Kg-dry	10	4/5/2011
Aroclor 1254	8800	538	µg/Kg-dry	10	4/5/2011
Aroclor 1260	ND	538	µg/Kg-dry	10	4/5/2011
Surr: Decachlorobiphenyl Sig 1	122	30-150	%REC	10	4/5/2011
Surr: Decachlorobiphenyl Sig 2	114	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	105	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	92.6	30-150	%REC	10	4/5/2011

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<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

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GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT:	JTS Group, Inc.	Lab Order:	1104010
Project:	25 Katrina Rd		

Lab ID:	1104010-015	Collection Date:	3/30/2011 1:17:00 PM
Client Sample ID:	Soil Panel 50-51	Matrix:	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	11.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	562	µg/Kg-dry	10	4/5/2011
Aroclor 1221	ND	562	µg/Kg-dry	10	4/5/2011
Aroclor 1232	ND	562	µg/Kg-dry	10	4/5/2011
Aroclor 1242	ND	562	µg/Kg-dry	10	4/5/2011
Aroclor 1248	ND	562	µg/Kg-dry	10	4/5/2011
Aroclor 1254	10400	562	µg/Kg-dry	10	4/5/2011
Aroclor 1260	ND	562	µg/Kg-dry	10	4/5/2011
Surr: Decachlorobiphenyl Sig 1	115	30-150	%REC	10	4/5/2011
Surr: Decachlorobiphenyl Sig 2	109	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	104	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	93.2	30-150	%REC	10	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-016 Collection Date: 3/30/2011 1:32:00 PM  
Client Sample ID: Soil Panel 69-70 Matrix: SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	9.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	549	µg/Kg-dry	10	4/5/2011
Aroclor 1221	ND	549	µg/Kg-dry	10	4/5/2011
Aroclor 1232	ND	549	µg/Kg-dry	10	4/5/2011
Aroclor 1242	ND	549	µg/Kg-dry	10	4/5/2011
Aroclor 1248	ND	549	µg/Kg-dry	10	4/5/2011
Aroclor 1254	9800	549	µg/Kg-dry	10	4/5/2011
Aroclor 1260	ND	549	µg/Kg-dry	10	4/5/2011
Surr: Decachlorobiphenyl Sig 1	146	30-150	%REC	10	4/5/2011
Surr: Decachlorobiphenyl Sig 2	138	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	118	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	99.0	30-150	%REC	10	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-017 Collection Date: 3/30/2011 1:37:00 PM  
Client Sample ID: Soil Panel 80-82 Matrix: SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	10	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	556	µg/Kg-dry	10	4/5/2011
Aroclor 1221	ND	556	µg/Kg-dry	10	4/5/2011
Aroclor 1232	ND	556	µg/Kg-dry	10	4/5/2011
Aroclor 1242	ND	556	µg/Kg-dry	10	4/5/2011
Aroclor 1248	ND	556	µg/Kg-dry	10	4/5/2011
Aroclor 1254	4640	556	µg/Kg-dry	10	4/5/2011
Aroclor 1260	ND	556	µg/Kg-dry	10	4/5/2011
Surr: Decachlorobiphenyl Sig 1	145	30-150	%REC	10	4/5/2011
Surr: Decachlorobiphenyl Sig 2	102	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	106	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	95.0	30-150	%REC	10	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc.  
Project: 25 Katrina Rd

Lab Order: 1104010

Lab ID: 1104010-018

Collection Date: 3/30/2011 1:13:00 PM

Client Sample ID: Soil Panel 97-99

Matrix: SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	3.0	1.0		wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	515		µg/Kg-dry	10	4/5/2011
Aroclor 1221	ND	515		µg/Kg-dry	10	4/5/2011
Aroclor 1232	ND	515		µg/Kg-dry	10	4/5/2011
Aroclor 1242	ND	515		µg/Kg-dry	10	4/5/2011
Aroclor 1248	ND	515		µg/Kg-dry	10	4/5/2011
Aroclor 1254	5820	515		µg/Kg-dry	10	4/5/2011
Aroclor 1260	ND	515		µg/Kg-dry	10	4/5/2011
Surr: Decachlorobiphenyl Sig 1	126	30-150		%REC	10	4/5/2011
Surr: Decachlorobiphenyl Sig 2	116	30-150		%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	114	30-150		%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	112	30-150		%REC	10	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-019 Collection Date: 3/30/2011 1:14:00 PM  
Client Sample ID: Soil Panel 90-92 Matrix: SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	4.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	521	µg/Kg-dry	10	4/5/2011
Aroclor 1221	ND	521	µg/Kg-dry	10	4/5/2011
Aroclor 1232	ND	521	µg/Kg-dry	10	4/5/2011
Aroclor 1242	ND	521	µg/Kg-dry	10	4/5/2011
Aroclor 1248	ND	521	µg/Kg-dry	10	4/5/2011
Aroclor 1254	9500	521	µg/Kg-dry	10	4/5/2011
Aroclor 1260	ND	521	µg/Kg-dry	10	4/5/2011
Surr: Decachlorobiphenyl Sig 1	135	30-150	%REC	10	4/5/2011
Surr: Decachlorobiphenyl Sig 2	116	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	111	30-150	%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	96.7	30-150	%REC	10	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-020 Collection Date: 3/30/2011 1:45:00 PM  
Client Sample ID: Soil Panel 103/Block Matrix: SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	4.0	1.0		wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	521		µg/Kg-dry	10	4/5/2011
Aroclor 1221	ND	521		µg/Kg-dry	10	4/5/2011
Aroclor 1232	ND	521		µg/Kg-dry	10	4/5/2011
Aroclor 1242	ND	521		µg/Kg-dry	10	4/5/2011
Aroclor 1248	ND	521		µg/Kg-dry	10	4/5/2011
Aroclor 1254	3450	521		µg/Kg-dry	10	4/5/2011
Aroclor 1260	ND	521		µg/Kg-dry	10	4/5/2011
Surr: Decachlorobiphenyl Sig 1	123	30-150		%REC	10	4/5/2011
Surr: Decachlorobiphenyl Sig 2	115	30-150		%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	105	30-150		%REC	10	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	98.9	30-150		%REC	10	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-021 Collection Date: 3/30/2011 2:45:00 PM  
Client Sample ID: Interior Floor South 3-5 Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	3.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1254	125	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	51.5	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	95.2	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	92.7	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	95.2	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	76.0	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811



## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11CLIENT: JTS Group, Inc.  
Project: 25 Katrina Rd

Lab Order: 1104010

Lab ID: 1104010-022

Collection Date: 3/30/2011 2:52:00 PM

Client Sample ID: Interior Floor Southeast 39-42

Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	3.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1254	178	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	51.5	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	116	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	107	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	113	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	93.7	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

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## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-023 Collection Date: 3/30/2011 3:01:00 PM  
Client Sample ID: Interior Floor East 69-72 Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	4.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	52.1	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	52.1	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	52.1	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	52.1	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	52.1	µg/Kg-dry	1	4/5/2011
Aroclor 1254	230	52.1	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	52.1	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	129	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	94.4	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	112	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	92.2	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.

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## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-024 Collection Date: 3/30/2011 3:14:00 PM  
Client Sample ID: Interior Floor North 90-93 Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	3.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1254	150	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	51.5	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	131	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	107	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	114	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	93.4	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

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## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc.  
Project: 25 Katrina Rd

Lab Order: 1104010

Lab ID: 1104010-025

Collection Date: 3/30/2011 3:28:00 PM

Client Sample ID: Interior Floor North 100-103

Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	3.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1254	200	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	51.5	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	116	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	98.1	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	109	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	88.5	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

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## ANALYTICAL REPORT

Reissue Date: 14-Apr-11  
Original Reported Date: 11-Apr-11

CLIENT: JTS Group, Inc. Lab Order: 1104010  
Project: 25 Katrina Rd

Lab ID: 1104010-026 Collection Date: 3/30/2011 3:41:00 PM  
Client Sample ID: Interior Floor West Laydown Matrix: CONCRETE DUST

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
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## PERCENT MOISTURE - 209A

Analyst: WFR

Prep Method:

Prep Date:

Percent Moisture	3.0	1.0	wt%	1	4/5/2011
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## POLYCHLORINATED BIPHENYLS - SW8082

Analyst: Jsi

Prep Method: (sw3540C)

Prep Date: 4/4/2011 8:22:38 AM

Aroclor 1016	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1221	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1232	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1242	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1248	ND	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1254	102	51.5	µg/Kg-dry	1	4/5/2011
Aroclor 1260	ND	51.5	µg/Kg-dry	1	4/5/2011
Surr: Decachlorobiphenyl Sig 1	108	30-150	%REC	1	4/5/2011
Surr: Decachlorobiphenyl Sig 2	100	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 1	105	30-150	%REC	1	4/5/2011
Surr: Tetrachloro-m-Xylene Sig 2	87.7	30-150	%REC	1	4/5/2011

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

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# ANALYTICAL QC SUMMARY REPORT

Date: 14-Apr-11

CLIENT: JTS Group, Inc.  
Work Order: 1104010  
Project: 25 Katrina Rd

TestCode: 8082\_S\_SOX

Sample ID: MB-17802	SampType: mbik	TestCode: 8082_S_SOX	Units: µg/Kg	Prep Date: 4/4/2011	RunNo: 40350						
Client ID: ZZZZZ	Batch ID: 17802	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 458812						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	50.0									
Aroclor 1221	ND	50.0									
Aroclor 1232	ND	50.0									
Aroclor 1242	ND	50.0									
Aroclor 1248	ND	50.0									
Aroclor 1254	ND	50.0									
Aroclor 1260	ND	50.0									
Surr: Decachlorobiphenyl Sig 1	104.0	0	100	0	104	30	150				
Surr: Decachlorobiphenyl Sig 2	96.98	0	100	0	97.0	30	150				
Surr: Tetrachloro-m-Xylene Sig 1	98.27	0	100	0	98.3	30	150				
Surr: Tetrachloro-m-Xylene Sig 2	91.48	0	100	0	91.5	30	150				

Sample ID: MB-17803	SampType: mbik	TestCode: 8082_S_SOX	Units: µg/Kg	Prep Date: 4/4/2011	RunNo: 40413						
Client ID: ZZZZZ	Batch ID: 17803	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 459527						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: MB-17803	SampType: mbik	TestCode: 8082_S_SOX	Units: µg/Kg	Prep Date: 4/4/2011	RunNo: 40413						
Client ID: ZZZZZ	Batch ID: 17803	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 459527						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	50.0									
Aroclor 1221	ND	50.0									
Aroclor 1232	ND	50.0									
Aroclor 1242	ND	50.0									
Aroclor 1248	ND	50.0									
Aroclor 1254	ND	50.0									
Aroclor 1260	ND	50.0									
Surr: Decachlorobiphenyl Sig 1	109.3	0	100	0	109	30	150				
Surr: Decachlorobiphenyl Sig 2	103.6	0	100	0	104	30	150				
Surr: Tetrachloro-m-Xylene Sig 1	107.1	0	100	0	107	30	150				

Qualifiers: BRL Below Reporting Limit  
J Analyte detected below quantitation limits  
S Spike Recovery outside recovery limits  
E Value above quantitation range  
ND Not Detected at the Reporting Limit  
H Holding times for preparation or analysis exceeded  
R RPD outside recovery limits

GeoLabs, Inc.

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**CLIENT:** JTS Group, Inc.  
**Work Order:** 1104010  
**Project:** 25 Katrina Rd

**TestCode:** 8082\_S\_SOX

Sample ID: MB-17803	SampType: mbik	TestCode: 8082_S_SOX	Units: µg/Kg	Prep Date: 4/4/2011	RunNo: 40413						
Client ID: ZZZZZ	Batch ID: 17803	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 459527						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: LCS-17802	SampType: Lcs	TestCode: 8082_S_SOX	Units: µg/Kg	Prep Date: 4/4/2011	RunNo: 40350						
Client ID: ZZZZZ	Batch ID: 17802	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 458813						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: LCS-17803	SampType: Lcs	TestCode: 8082_S_SOX	Units: µg/Kg	Prep Date: 4/4/2011	RunNo: 40413						
Client ID: ZZZZZ	Batch ID: 17803	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 459528						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

**Qualifiers:** BRL Below Reporting Limit  
J Analyte detected below quantitation limits  
S Spike Recovery outside recovery limits  
E Value above quantitation range  
ND Not Detected at the Reporting Limit  
H Holding times for preparation or analysis exceeded  
R RPD outside recovery limits

**GeoLabs, Inc.**

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CLIENT: JTS Group, Inc.  
 Work Order: 1104010  
 Project: 25 Katrina Rd

TestCode: 8082\_S\_SOX

Sample ID: LCS1-17802	SampType: Lcsd	TestCode: 8082_S_SOX	Units: µg/Kg	Prep Date: 4/4/2011	RunNo: 40350						
Client ID: ZZZZZ	Batch ID: 17802	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 458814						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016	53.19	50.0	100	0	53.2	40	140	67.8	24.1	50	
Aroclor 1260	ND	50.0	100	0	48.4	40	140	62.72	0	50	
Surr: Decachlorobiphenyl Sig 1	49.50	0	100	0	49.5	30	150	0	0	0	
Surr: Decachlorobiphenyl Sig 2	46.87	0	100	0	46.9	30	150	0	0	0	
Surr: Tetrachloro-m-Xylene Sig 1	47.40	0	100	0	47.4	30	150	0	0	0	
Surr: Tetrachloro-m-Xylene Sig 2	43.79	0	100	0	43.8	30	150	0	0	0	

Sample ID: LCS1-17803	SampType: Lcsd	TestCode: 8082_S_SOX	Units: µg/Kg	Prep Date: 4/4/2011	RunNo: 40413					
Client ID: ZZZZZ	Batch ID: 17803	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 459529					
Analyte	Result	PQL	SPK value	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016	103.5	50.0	100	0	104	40	140	106.8	3.12	50	
Aroclor 1260	99.42	50.0	100	0	99.4	40	140	99.55	0.133	50	
Surr: Decachlorobiphenyl Sig 1	105.4	0	100	0	105	30	150	0	0	0	
Surr: Decachlorobiphenyl Sig 2	101.3	0	100	0	101	30	150	0	0	0	
Surr: Tetrachloro-m-Xylene Sig 1	101.9	0	100	0	102	30	150	0	0	0	
Surr: Tetrachloro-m-Xylene Sig 2	93.24	0	100	0	93.2	30	150	0	0	0	

Qualifiers: BRL Below Reporting Limit  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside recovery limits  
 E Value above quantitation range  
 ND Not Detected at the Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 R RPD outside recovery limits

GeoLabs, Inc.

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## ANALYTICAL QC SUMMARY REPORT

Date: 14-Apr-11

CLIENT: JTS Group, Inc.  
 Work Order: 1104010  
 Project: 25 Katrina Rd

TestCode: 8082\_S\_SOX

Sample ID: 1103382-067AMS	SampType: ms	TestCode: 8082_S_SOX	Units: µg/Kg-dry	Prep Date: 4/4/2011	RunNo: 40350						
Client ID: ZZZZZ	Batch ID: 17802	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 458815						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016	107.3	51.5	103.1	0	104	40	140				
Aroclor 1260	97.03	51.5	103.1	0	94.1	40	140				
Surr: Decachlorobiphenyl Sig 1	106.7	0	103.1	0	103	30	150				
Surr: Decachlorobiphenyl Sig 2	106.4	0	103.1	0	103	30	150				
Surr: Tetrachloro-m-Xylene Sig 1	100.3	0	103.1	0	97.3	30	150				
Surr: Tetrachloro-m-Xylene Sig 2	92.28	0	103.1	0	89.5	30	150				

Sample ID: 1104010-011AMS	SampType: ms	TestCode: 8082_S_SOX	Units: µg/Kg-dry	Prep Date: 4/4/2011	RunNo: 40413						
Client ID: Soil Panel 0-1	Batch ID: 17803	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 459525						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016	135.9	52.6	105.3	0	129	40	140				
Aroclor 1260	257.7	52.6	105.3	0	245	40	140				
Surr: Decachlorobiphenyl Sig 1	126.6	0	105.3	0	120	30	150				S
Surr: Decachlorobiphenyl Sig 2	118.4	0	105.3	0	112	30	150				
Surr: Tetrachloro-m-Xylene Sig 1	122.4	0	105.3	0	116	30	150				
Surr: Tetrachloro-m-Xylene Sig 2	107.3	0	105.3	0	102	30	150				

Sample ID: 1103382-067AMSD	SampType: msd	TestCode: 8082_S_SOX	Units: µg/Kg-dry	Prep Date: 4/4/2011	RunNo: 40350						
Client ID: ZZZZZ	Batch ID: 17802	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 458816						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016	114.9	51.5	103.1	0	111	40	140	107.3	6.81	50	
Aroclor 1260	101.4	51.5	103.1	0	98.4	40	140	97.03	4.45	50	
Surr: Decachlorobiphenyl Sig 1	110.7	0	103.1	0	107	30	150	0	0	0	
Surr: Decachlorobiphenyl Sig 2	105.5	0	103.1	0	102	30	150	0	0	0	

**Qualifiers:** BRL Below Reporting Limit  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside recovery limits

H Holding times for preparation or analysis exceeded  
 R RPD outside recovery limits

GeoLabs, Inc.

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

**CLIENT:** JTS Group, Inc.  
**Work Order:** 1104010  
**Project:** 25 Katrina Rd

**TestCode:** 8082\_S\_SOX

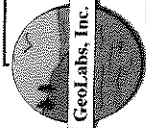
Sample ID: 1103382-067AMSD		SampType: msd	TestCode: 8082_S_SOX		Units: µg/Kg-dry	Prep Date: 4/4/2011		RunNo: 40350			
Client ID: ZZZZZ		Batch ID: 17802	TestNo: SW8082		(sw3540C)	Analysis Date: 4/5/2011		SeqNo: 458816			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Tetrachloro-m-Xylene Sig 1	105.4	0	103.1	0	102	30	150	0	0	0	0
Surr: Tetrachloro-m-Xylene Sig 2	96.69	0	103.1	0	93.8	30	150	0	0	0	0

Sample ID: 1104010-011AMSD	SampType: msd	TestCode: 8082_S_SOX	Units: µg/Kg-dry	Prep Date: 4/4/2011	RunNo: 40413						
Client ID: Soil Panel 0-1	Batch ID: 17803	TestNo: SW8082	(sw3540C)	Analysis Date: 4/5/2011	SeqNo: 459526						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	129.8	52.6	105.3	0	123	40	140	135.9	4.56	50	
Aroclor 1260	561.1	52.6	105.3	0	533	40	140	257.7	74.1	50	SR
Surr: Decachlorobiphenyl Sig 1	120.4	0	105.3	0	114	30	150	0	0	0	
Surr: Decachlorobiphenyl Sig 2	105.4	0	105.3	0	100	30	150	0	0	0	
Surr: Tetrachloro-m-Xylene Sig 1	114.6	0	105.3	0	109	30	150	0	0	0	
Surr: Tetrachloro-m-Xylene Sig 2	102.2	0	105.3	0	97.1	30	150	0	0	0	

<b>Qualifiers:</b>	BRL	Below Reporting Limit	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside recovery limits
	S	Spike Recovery outside recovery limits				

**GeoLabs, Inc.**

45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811



# CHAIN OF CUSTODY RECORD

GeoLabs, Inc. Environmental Laboratories  
45 Johnson Lane, Braintree, MA 02184  
p 781.848.7844 • f 781.848.7811  
www.geolabs.com

Sample Handling: circle choice  
Filtration Done Not Needed  
Lab to do Lab to do Y/N

Special Instructions  
SAMPLES TAKEN by STRIKES SOUP 0-2" under Canille  
EPA TOSCA SOX/LET

Turnaround: circle one 1-day 2-day	Data Delivery: circle choice (s) email PDF Excel	MCP Methods DEP Other	Requirements: circle choice (s) CT RCP (Reasonable Confidence Protocols) State (Fed Program) Criteria EPA TSCA
------------------------------------------	-----------------------------------------------------------	-----------------------------	----------------------------------------------------------------------------------------------------------------------

Client: JTS Group Inc	Phone: 508 791 3775	Project: 25 Katrina Road Chelmsford
Address: 74 William St Worcester MA 01609	Fax: 508 798 9134	Project PO:
Contact: Jeffrey L. Dill	email: JTS.Dill@Charters.net	Invoice to:

COLLECTION		CONTAINER		SAMPLE LOCATION / ID	M A T R I X	C O M P	G R A B	GeoLabs SAMPLE NUMBER	Analysis Requested										TEMPERATURE			
D A T E	T I M E	S A M P L E D	T Y P E																L A B	P H		
3/30/11	2:22	JLW	B	Soil Panel 0-1	1	S	X	4010-011	X													
	10:00		B	Soil Panel 11-12	1	S	X	-012	X													
	10:57		B	Soil Panel 32-33	1	S	X	-013	X													
	11:56		B	Soil Panel 37-38	1	S	X	-014	X													
	1:17		B	Soil Panel 50-51	1	S	X	-015	X													
	1:32		B	Soil Panel 69-70	1	S	X	-016	X													
	1:37		B	Soil Panel 80-82	1	S	X	-017	X													
	1:13		B	Soil Panel 97-99	1	S	X	-018	X													
	1:14		B	Soil Panel 90-92	1	S	X	-019	X													
	1:45		B	Soil Panel 103/Block	1	S	X	-020	X													

Matrix Codes: GW = Ground Water WW = Waste Water	DW = Drinking Water SL = Sludge	S = Soil O = Oil	A = Air OT = Other	Received on Ice <input checked="" type="checkbox"/>	Preservatives 1 = Hcl 2 = HNO3 3 = H2SO4 4 = Na2S2O3	5 = NaOH 6 = MEQH	7 = Other	Containers: A = Amber G = Glass S = Summa	B = Bag P = Plastic V = Voa	0 = Other
Relinquished by: JTS	Jeffrey L.D.	Date / Time: 3/31/11	3:40	Received by: Dan Patrick	Date / Time: 3/31/11	3:10				

# CHAIN OF CUSTODY RECORD

GeoLabs, Inc. Environmental Laboratories  
45 Johnson Lane, Braintree, MA 02184  
p 781.848.7844 • f 781.848.7811  
www.geolabs.com

Sample Handling: circle choice  
Done  
Not Needed  
Lab to do  
Lab to do Y/N

Special Instructions

8 POINT COMPOSITES IN 100 S.F. Areas Concrete

Turnaround: circle one

1-day  
3-day  
5/7-days

Data Delivery: circle choice (s)

Fax  
Format:  
Excel

MCP Methods

DEP

Other

Requirements: circle choice (s)

CT RCP (Reasonable Confidence Protocols)

State (Fed Program) Criteria EPA TSCA

Client: JTS Group Inc

Address: 79 William St

Worcester MA 01609

Contact: Jeffery Dill

Phone: 508 791 3775

Fax: 508 799 9134

email: JTS Dill@Charter.net

Project: 25 Katrina Road Chelmsford

Project PO:

Invoice to \*:

Preservative:

Analysis Requested

DATE	TIME	SAMPLER	SAMPLE LOCATION / ID	CONTAINER		MATRIX	COMPOUND	GRAVITY	Geolabs SAMPLE NUMBER	Analysis Requested									
				TYPE	QUANTITY					L	A	B	P	H	TEMPERATURE				
3/30/11	2:45	JCP	interior floor SOUTH 3-5	B	1	OT	X		4010-021										
	2:52		" " SOUTH 3-5	B	1	OT	X		-022										
	3:01		" " SOUTH 3-5	B	1	OT	X		-023										
	3:14		" " SOUTH 3-5	B	1	OT	X		-024										
	3:28		" " SOUTH 3-5	B	1	OT	X		-025										
	3:41		" " SOUTH 3-5	B	1	OT	X		-026										

Matrix Codes:

GW = Ground Water

WW = Waste Water

DW = Drinking Water

SL = Sludge

S = Soil

O = Oil

Received on Ice

Preservatives

1 = HCl

2 = HNO3

3 = H2SO4

4 = Na2S2O3

5 = NaOH

6 = MECH

Containers:

A = Amber

G = Glass

S = Summa

B = Bag

P = Plastic

V = Voa

0 = Other

Relinquished by:

Date / Time

Received by:

Date / Time

3/31/11

3/31/11

3:40

3:40